

NAVAL POSTGRADUATE SCHOOL
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THESIS

**AN ANALYSIS OF DEFENSE CONTRACT MANAGEMENT
COMMAND SPRINGFIELD'S SUPPLIER BASE**

by

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December 1998

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Defense Contract Management Commands (DCMC) are responsible for the administration of the contracts let by the Department of Defense (DOD). DOD has the largest acquisition budget in the Federal Government. As such, DCMCs are extremely busy. With an increasing workload and a decreasing defense budget, more is being asked of the Government employee at a DCMC than ever before. The backlog of work and the host of changes in the way DOD is re-engineering its practices make it very difficult for a contract administrator to determine whom he or she is dealing with in the commercial sector. This Analysis was designed to find out whom it is that DOD does business with and determine what improvements to our business relationship can be found by studying the demographics of the customer. Two hundred six contractors chose to participate in the study, which provided a glimpse into the characteristics of one DCMC region.

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SPRINGFIELD'S SUPPLIER BASE**

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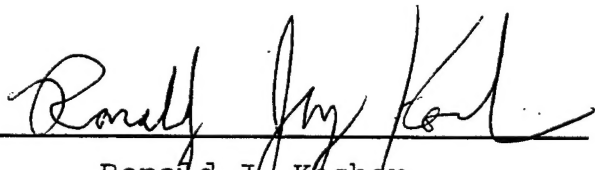
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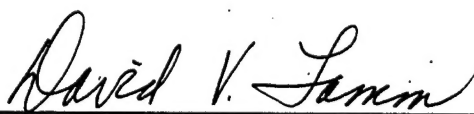
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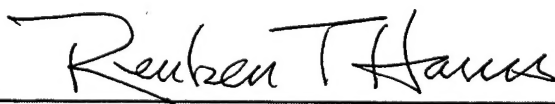
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ABSTRACT

Defense Contract Management Commands (DCMC) are responsible for the administration of the contracts let by the Department of Defense (DOD). DOD has the largest acquisition budget in the Federal Government. As such, DCMCs are extremely busy. With an increasing workload and a decreasing defense budget, more is asked of the Government employee at a DCMC than ever before. The backlog of work and the host of changes in the way DOD is re-engineering its practices make it very difficult for a contract administrator to determine whom he or she is dealing with in the commercial sector. This analysis was designed to find what improvements to our business relationship could be found by studying the demographics of the customer. Two hundred six contractors chose to participate in the study, which provided a glimpse into the characteristics of one DCMC region.

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I. INTRODUCTION

A. BACKGROUND

This thesis provides a detailed analysis of the vendors who have contracts with the Department of Defense for which Defense Contract Management Command (DCMC), Springfield, New Jersey provides contract administration. The objective is to determine what insights the Government can obtain by studying the vendor base for a geographic region. These insights are important because the Defense Industrial Base has changed significantly since the Department of Defense (DOD) drawdown. Not only have the businesses in the Industrial Base changed, but also the activities that interact with the Industrial Base, such as DCMC Springfield, have been downsized.

A survey was sent to all contractors in Northern New Jersey who have an active contract with the Department of Defense. The results of that survey were used to develop a picture of who it is we, the DOD acquisition personnel, deal with in the commercial sector. By gaining insight to who our partners are, the researcher hopes to provide information to the reader as to how we can improve the

relationship between the U.S. Government and the private sector.

DCMC has undergone significant reorganization over the past few years, while the Government has re-engineered its business practices. Examples of these changes include the move from six DCMC districts to three DCMC districts, the preference for Commercial Specifications over Military Specifications, and the embracing of Electronic Commerce. In the face of ever increasing responsibilities, it has become more difficult than ever for any one individual at one of the regional offices to truly know the big picture of just whom it is that we are dealing with as contract administrators.

This knowledge is necessary because, after five years of downsizing, the personnel remaining on the Government workforce must do more work with less budget than Contract Administrators of the past. To be World Class administrators, personnel at a DCMC office must be as knowledgeable as possible to earn the respect of the business community and the taxpayer. With this understanding, attempts at improving contract administration in today's environment can be undertaken.

B. RESEARCH QUESTIONS

The objective of this study is to conduct an analysis of the industrial base in one particular geographic region to determine what information the Government, particularly the Department of Defense, can discover about its business partners. With this objective in mind, the researcher used the following questions:

1. Primary Research Question

What will a comprehensive analysis of Defense Contract Management Command Springfield's supplier base suggest about how the Department of Defense could improve the administration of Government Contracts?

2. Subsidiary Research Questions

- a. Who are the vendors in DCMC Springfield's vendor base and how might the vendor base be classified for demographic analysis?
- b. What patterns and trends in DCMC Springfield's vendor's contractual relationships can be discovered through subsequent analysis of the DCMC Springfield vendor base?
- c. What effect does business size (small versus large) have on vendor participation in various Government programs?

- d. What information about DCMC Springfield's vendors, discovered during research and currently not known to DCMC Springfield, could be provided to benefit DCMC Springfield's contract administration personnel?

After structuring the primary and subsidiary research questions, the researcher developed the following series of items that were applied to the raw data obtained from the responders to classify the vendor base. These items were used as questions in a survey distributed to all companies falling under the cognizance of DCMC Springfield.

- Small business vs. large business
- Number of 8(a) firms
- Employee pool size
- Annual sales
- Goods vs. services
- Industry found in Northern New Jersey, by SIC code
- Market position - monopolistic or fully competitive
- Range of years in existence and average age
- Location of the companies

- Determination of whether business with DOD increased or decreased over the last five years
- Dependence of these contractors on DOD business, based on percentage of the work they receive from DOD or the amount of subcontract work for a DOD contract they have
- Participation by these companies in the latest Government initiatives such as Process Oriented Contract Administration Services (PROCAS), PRIME VENDOR, or ISO9000 certification
- Size of contract closeout backlog
- Number of vendors with contracts for which Cost Accounting Standards (CAS), Forward Pricing Rate Agreements, and Progress Payments apply
- Percentage of vendors with a delinquent delivery in the last 36 months
- Percentage of vendors Terminated for Default in the last 36 months
- Number of vendors who protested a dispute
- Overall business climate (positive or negative)

C. SCOPE, LIMITATIONS, AND ASSUMPTIONS

The population under study consists of all vendors for which DCMC Springfield holds contract administration responsibility. Personnel at DCMC Springfield provided a database containing the addresses of all contractors that had an open contract with DOD. This database contained the addresses of 891 companies based on the following:

1. Scope

(a) Contracts for the Department of Defense - Army, Navy, Air Force, Marines and the Defense Logistics Agency

(b) Geographically - only vendors in Northern New Jersey.

(c) Time - only contractors who were awarded a contract in the three most recent fiscal years (1996, 1997, and 1998).

2. Limitations

During the early search for information, it became obvious that MOCAS (Mechanization of Contract Administration Services) and ALERTS would not be able to uncover enough information to write conclusively about DCMC

Springfield's contractors. The type of information desired by the researcher was not in the MOCAS system. Although it did not have demographic information, ALERTS was useful for providing the contractor addresses and the name and position of all the employees at DCMC Springfield. For these reasons and the fact the researcher wanted opinions, it was decided the survey method would be necessary.

The questionnaire was sent to 891 companies within the geographical boundaries for the Springfield area office. 220 vendors responded to the survey for a 24.7% return rate, 216 by U.S. mail and 4 via the internet. Of the 220 returns, 206 were used for this study. Fourteen surveys were returned after the cut-off date for inclusion.

Interestingly, 112 surveys were returned to the researcher by the U.S. Mail. The majority of these were returned because the company moved or went out of business. Since this represents a significant percentage, 12.6%, of the companies on the mailing list, and because this list was considered the best source of addresses for the vendors, Chapter V explains the circumstances surrounding this anomaly.

The researcher was frustrated in his quest to make the survey speedier by lack of full electronic communication

between the Government and Industry. DOD does not have a comprehensive e-mail listing for its contractors. Even if the Government did have such a listing it would not be encompassing enough to be used to reach all the contractors in DCMC Springfield's vendor base. This is due to the fact that many of our business partners have not joined the electronic revolution. Some of the smallest partners have limited computer resources or choose not to use the Internet.

It was hoped the survey could be done electronically for several reasons: electronic responses were quicker outgoing and returning, paper surveys were expensive to reproduce in addition to providing self-addressed stamped envelopes, and results could be cataloged instantaneously when returned electronically.

The researcher discovered DCMC Springfield had sporadic e-mail addresses, but not nearly enough to reach all the contractors in the population. DLA is in the process of building a website where all vendors with a CAGE code and an existing e-mail address can be reached. At the time of this research, it was not possible to conduct this survey electronically. As a result, funds were required to process the survey; replies took weeks to mail and return;

and the results had to be hand-entered into an ACCESS database.

3. Assumptions

The researcher assumes that the reader has some familiarity with the acquisition and contracting field. If the reader is unfamiliar with the acquisition process, they may need to refer to the Federal Acquisition Regulation, (FAR) or other regulations as appropriate. Chapter II of this thesis discusses the background of the Defense Contract Management Command for those not familiar with its operation. Additionally, definitions for words used throughout the survey, are provided in Chapter II.

D. METHODOLOGY

A comprehensive literature review was conducted concerning the Defense Industrial Base and contract administration. The researcher obtained background information about the responsibilities of the Defense Contract Management Command (DCMC) and the Defense Logistics Agency (DLA) structure. Personal interviews and

e-mails were conducted with contract administration personnel at DCMC Springfield and DCMC San Francisco.

The survey method was the primary means of obtaining information. In order to acquire the needed data to make conclusions about the Northern New Jersey territory, the researcher used the following plan for this research effort:

1. A point of contact was established at DCMC Springfield with the individual responsible for database maintenance. An electronic file of DCMC Springfield's vendor base was requested using the scope identified above.
2. The database was reviewed to see which, if any of the questions could be answered directly from the database. This information was used to start the familiarization process for vendors doing business with the Government in Northern New Jersey.
3. Other means of acquiring information about DCMC Springfield were sought such as file review,

telephone interviews, MOCAS, ALERTS, e-mail correspondence, website visits, journals, and other similar sources.

4. A survey was developed using guidance from the questions determined in subsidiary question (a). A copy of the survey, with a cover letter explaining its importance, was mailed to all the vendors in the population being studied. Concurrently, a website was developed offering the same survey to satisfy individuals who are more inclined to respond in a modern or paperless manner.

The survey was designed to minimize the amount of time required by the respondents. Nearly all responses required a mere check mark. This stance was based on the researcher's belief that any effort to make the survey easier would increase the likelihood of a response.

Another means to increase responses was to make it as easy as possible to reply. Included with the survey was a self-addressed, stamped envelope and the researcher's website address, fax number and e-mail address. The survey

was anonymous, but the respondents had the option to declare their name, address and point of contact if they so choose. A copy of the survey and the cover letter is presented in Appendix A.

The cover letter introduced the researcher and his purpose in conducting the study. The author attributes the large response to the fact that the cover letter mentioned his next duty station is the activity responsible for administering the contractors discussed in this thesis. The cover letter assured the responder's anonymity. This was deemed important so as not to scare off a company that feared to respond because of sensitive corporate information or because they made a negative comment about the DOD-industry relationship.

In addition to receiving statistical information from the contractors via the survey, the researcher provided respondents with an opportunity to voice any matter concerning the Defense - Private Industry relationship. This was optional because the researcher believed the best responses would arise when the respondents were under no obligation to answer.

E. BENEFITS OF THE THESIS

The purpose of this study was to examine our business partners in the commercial sector. By learning more about whom it is with which we are partnering, perhaps we can focus the smaller Defense workforce to get the most benefit from our shrinking budget. This could translate to better personnel resource allocation within DCMC and DOD to accomplish contract administration. Also, by having a better understanding of our supplier base, more reasoned decisions regarding reduced oversight can be made.

F. ORGANIZATION OF THE THESIS

The remainder of the thesis is organized into the following chapters: Chapter II provides an overview of contract administration as it relates to the Defense Logistics Agency and the Defense Contract Management Command structure. Chapter III discusses Part I of the survey data and results. Chapter IV presents Part II of the survey data and results. Chapter V analyzes the results of Chapters III and IV as seen through the eyes of small and large businesses. Chapter VI draws conclusions

about DCMC Springfield contractors, offers recommendations for improvements to the Government-industry relationship, answers the research questions, and makes suggestions for further research.

II. BACKGROUND

A. INTRODUCTION

This chapter presents a brief overview of the Defense Logistics Agency and the Defense Contract Management Command concept. Next is an introduction to Defense Contract Management Command, Springfield, New Jersey including an overview of its responsibilities and personnel.

B. DEFENSE LOGISTICS AGENCY

The Defense Logistics Agency (DLA) is a logistics combat support agency whose primary role is to provide supplies and services to America's military forces worldwide. DLA employs over 48,000 personnel, both civilian and military. They are located at over 500 sites close to, and partnered with, their customers and suppliers [Ref. 1]. DLA is headquartered at Fort Belvoir, VA.

DLA manages over four million consumable items, processing more than 30 million annual distribution actions and administering over \$900 billion of DOD and other agency contracts [Ref. 2]. If a member of the Armed Forces fights

with it, wears it, eats it, or burns it, the item was probably provided by DLA. DLA also handles disposal after a customer is finished using an item.

DLA was formed when President Hoover commissioned a panel to study centralizing management of common military logistics support shortly after World War II. In 1952, the joint Army-Navy-Air Force Support Center was established to buy, store, and issue common items for the military. Originally, each service was responsible to manage a set of items for all branches, for instance, the Army managed Food, the Navy managed Medical, and the Air Force handled Electronics [Ref. 3].

This concept did not meet with the original intent of the Hoover study, so in 1961 Secretary of Defense Robert McNamara ordered the services to consolidate into a single-manager approach. This was a good decision because the previous seven years experience was noted for the complications of inter-service dealing. Each service developed their own sets of duplicate rules and the branches were not good at talking to each other [Ref. 3].

DLA's predecessor was the Defense Supply Agency (DSA), which began operating on Jan 1, 1962. Of note to the

contracting field was the 1965 consolidation of most of the contract administration activities of the Military Branches. This was done to avoid duplication of effort and provide uniform procedures in administering contracts. This new activity of the Defense Supply Agency was called the Defense Contract Administration Services (DCAS). Although DCAS's mission was to perform contract administration for all of DOD, each Service retained contract administration for its own state-of-the-art weapon systems. Initially, contract administration involved ten percent of DSA. Just a few years later, the contract administration functions would consume half of all of DSA's resources, the other half being involved in supply support and logistics [Ref. 3].

The agency was renamed the Defense Logistics Agency in 1977 to reflect its broadened role in military logistics [Ref. 3]. The remnants of the Services' desire to maintain control of their own programs came to an end in 1990 when DOD directed that virtually all contract administration functions be consolidated. This was the genesis for the Defense Contract Management Command.

C. DEFENSE CONTRACT MANAGEMENT COMMAND

When the Defense Contract Management Command (also headquartered at Fort Belvoir) was formed in 1990, it absorbed the Defense Contract Administration Services. This consolidation stemmed from a Defense Management Report (DMR) presented to President Bush by Secretary of Defense Dick Cheney. The DMR stressed the need for uniform procurement policy, upgrading the quality of the Contract Administrative Services (CAS) work force, and reduce overhead and payroll costs. Up to this point DCAS was not a true, single manager of defense contracts. It took the formation of DCMC to force the individual Services to relinquish their holds [Ref. 3].

DCMC was charged with DOD-wide contract management support, engineering and program support, quality assurance, and contractor payment. Their mission is to provide customer focused contract management services - throughout the acquisition life cycle - around the clock, around the world [Ref. 4].

FAR Part 42 lists the responsibilities of a Contract Administration Office (CAO). Far Part 42.302 explains the Sixty-nine specific functions normally delegated to a CAO.

A Procuring Contracting Officer (PCO) may retain any of these functions unless the PCO has been designated to perform these functions by the cognizant Federal agency. Highlights of some of the key functions performed by DCMC are:

- performing price/cost analysis, overhead reviews and contractor system reviews.

- property and plant clearance, transportation arrangement, packaging, and industrial capability assessments.

- coordinate the DLA Fraud Program.

- Pre-award services such as Early Contract Administration Services.

DCMC, employing 13,900 personnel, is divided into two districts within the United States and one district for international contracts. DCMC East is located in Boston, MA and DCMC West is in El Segundo, CA. DCMC International is stationed at Fort Belvoir, VA. In a typical year, DCMC manages 366,000 prime contracts, valued at more than \$918 billion, awarded to 21,466 contractors [Ref. 5].

When the Government deems that a significant level of oversight is necessary, an office is established at the site of a major contractor. These offices are identified as DCMC and the plant name. An example is DCMC Boeing. For smaller contracts requiring less oversight, an area office is responsible for contract administration. These offices are named for the city in which they are based, e.g., DCMC Springfield. Unlike the plant office which is primarily responsible for one contractor, the area office may be responsible for hundreds of contractors and thousands of contracts.

Several categories of Government workers are found at a DCMC. Contract Administration is so complex that it is not feasible for one to be a jack of all trades. Therefore work is divided into these specialties:

- Contract Administrators
- Price/Cost Analysts
- Engineers
- Quality Assurance Representatives
- Industrial Specialists
- Procurement Analysts
- Property Administrators
- Plant Clearance Officers
- Small and Disadvantaged Business Specialists
- Traffic Management Specialists
- Packaging Specialists
- Industrial Property Management Specialists

Not all specialists may be found at every DCMC. The list is provided to demonstrate what range of talent it takes to administer Government contracts properly.

D. DCMC SPRINGFIELD

Defense Contract Management Command Springfield is located at Picatinny Arsenal, New Jersey. Once located in the town of Springfield, it was moved to the Army property, Picatinny Arsenal, as part of a Base Re-alignment and Closure (BRAC) order, in an effort to maximize existing Government property and free agencies from non-Government owned, leased facilities [Ref. 6].

Of the approximately 50 separate commands in the DCMC East District, the Springfield group is the third largest, in terms of employees. Nearly 200 personnel work in Building One of Picatinny Arsenal and about 100 personnel, mainly quality assurance representatives, work in the field. The two largest employee groups outside of the main office are located at the plants of ITT in Clifton, New Jersey and GEC-Kearfott in Wayne, New Jersey [Ref. 6].

DCMC Springfield is responsible for the administration of contracts let by the Department of Defense in Northern New Jersey. The State is divided into two halves. DCMC Philadelphia provides administrative support for Southern New Jersey. DCMC Springfield has the geographic responsibility for the area that starts from Monmouth County and extends through the Northern border of New Jersey and New York.

The personnel at DCMC Springfield serve as "information brokers" for contracting officers and program managers by protecting the Government's interests throughout the life of the contract.

E. DEFINITIONS

Before examining the Data regarding contractors in this study, it is important that certain terms be defined for a clearer understanding.

1. Armed Service Board of Contract Appeals (ASBCA).

The legal body with the authority to grant relief and hear claims of interested parties against the Government [Ref. 7:p. 292].

2. Administrative Contracting Officer (ACO). The individual responsible for the overall management of the contract during performance. The key interface between the Government and the contractor [Ref. 7:p. 218].
3. ALERTS. Part of a management system which notifies the ACO that certain actions and/or reports are due in order to complete certain contract administration actions [Ref. 8].
4. Cost Accounting Standards (CAS). A statement formally issued by the Cost Accounting Standards Board enunciating a principle to be followed by a contractor concerning the treatment of costs incurred during performance of the contract [Ref. 7:p. 165].
5. Contract closeout. Physical completion of a contract. The process that ensures the contractor has complied with all requirements and

the Government has fulfilled all its obligations [Ref. 7:p. 283].

6. Forward Pricing Rate Agreement (FPRA). A written agreement negotiated between a contractor and the Government to make certain rates available during a specified period for use in pricing contracts or modifications. Such rates represent reasonable projections of specific costs that are not easily estimated for, identified with, or generated by a specific contract, contract end item, or task [Ref. 7:p. 164].
7. General Accounting Office (GAO). The office designated to receive protests, not sent to the PCO or other agency, from disgruntled contractors. A contractor needs to alert GAO within ten days of it becoming aware of the basis for protest [Ref. 9].
8. Good. Merchandise. An item manufactured or resold by a contractor for the Government.

9. ISO9000. A series of quality standards developed to meet customers' quality assurance requirements. It is designed for two-party contractual situations and provides generic guidelines for documenting, implementing, and demonstrating quality assurance and management [Ref. 10].
10. Service. Work done for the Government by a contractor. A contractor performs a function vice having a Government employee.
11. Procuring Contracting Officer (PCO). A contracting officer at the procuring activity that has the authority to obligate the Government by entering into a contract. The PCO is responsible for ensuring the contract is awarded to a responsible contractor, in the best interest of the Government [Ref. 7].
12. Prime Vendor. A geographical, commercial distribution system arranged via distributors who

have received contracts with the Government to be the providers for select goods. Prime Vendor currently is used for subsistence and medical programs [Ref. 11].

13. Process Oriented Contract Administration Services (PROCAS). The seamless approach for the teaming of DCMC and its business partners to select, analyze, and improve processes [Ref. 12].

14. Progress Payment. A situation where a contractor receives money as work progresses during the contract period. The amount is based on costs incurred or a percentage of work performed. Progress Payments are viewed as a form of contract financing [Ref. 7:p. 222].

15. Standard Industrial Classification (SIC). These are categories used to describe the nature of the good or service provided by a contractor. SICs are represented by a four digit code. They are

intended to cover the entire field of economic activities [Ref. 13]

16. Small Business. A term for recognizing a contractor based on number of employees or annual sales. Usually associated with socio-economic contracting policies for promotion of smaller companies or for ensuring fairness between competing small and large organizations [Ref. 7:p. 317].
17. Termination for Convenience (T4C). The right of the Government to end an agreement whenever it is in the best interest of the Government. A T4C may be partial or whole. When the Government chooses to conduct a T4C, it is responsible to the other party for the portion of the contract performed [Ref. 7:p. 276].
18. Termination for Default (T4D). The exercise of a basic legal right of the Government to end a contractual relationship with a vendor when that

vendor has not performed as called for in the contract [Ref. 7:p. 274].

19. 8a Firm. A small disadvantaged business concern that is at least 51 percent unconditionally owned by one or more individuals who are both socially and economically disadvantaged [Ref. 14].

F. SUMMARY

This chapter provided the reader with background information about organizations and terms discussed in the next chapters. By getting an understanding of the functions provided by a DCMC and by understanding who DCMC Springfield is, one can have a better appreciation of the material to follow.

Chapter III presents the data, links it to questions from Part I of the survey, shows the response, and analyzes it.

III. DEMOGRAPHICS

A. INTRODUCTION

This chapter presents and analyzes the data that were collected concerning the survey population's demographics. All material presented in Chapter III used survey Part I as its source.

The objective of Part I of the survey was to conduct a demographic study of the contractors currently doing business with DOD. The goal of this section is to give a broad picture of the average vendor in Northern New Jersey.

B. PRESENTATION OF SURVEY DATA

The following data are the results of the first part of the survey. Ten numbered questions covering thirteen topics were asked about each company's demographics.

1. Primary Product

The survey's first question was used to get a text response beyond the Standard Industrial Classification (SIC) Code response requested of the participants in

question 1.c of the survey. Of the 206 respondents, only three did not provide a response to survey question 1.a.

By offering the vendor an opportunity to state what good or service they performed, the researcher achieved two things, first, this information was used to group the vendors into similar fields for categorization. The SIC Code tells a lot about a company but not enough to indicate what community the vendor is in. For example, many vendors may have revealed through their SIC that they make electronics. What that does not indicate is if that electronic item is for the aerospace industry, marine application or laboratory equipment.

Second, it helped the researcher to make generalizations about the vendors who did not provide a response to survey question 1.c. If a respondent neglected to provide a reply in 1.c., the researcher could guess the SIC from the information written in 1.a. As it turned out, this proved quite valuable as 66 vendors did not provide a SIC, but due to their response to 1.a, the researcher was able to surmise the SIC Code that applied to them.

Table 3.1 attempts to place the 201 usable responses into 28 categories developed by the researcher. Many of the categories could change in terms of the number of firms

CATEGORIZATION FOR DCMC SPRINGFIELD VENDORS

Categories	# Firms	Small	ISO9000
Electronics	20	18	4
Engines, Gears, Valves	18	13	5
Nuts, Bolts, Gaskets, Washers	16	14	3
Marine Parts and Equipment	12	8	1
Medical	11	7	2
Instruments	11	6	2
Metals	11	9	4
Rubber and Plastics	11	8	2
Spare Parts, non-specific	9	9	0
Video, Optical, Photo	9	6	2
Microwave	6	4	2
Communication	6	6	0
Oils, Lubes and Supplies	6	5	2
Heavy Industry	6	5	2
Computers	5	5	1
Chemicals	5	4	1
Aerospace	5	3	3
Research & Development	5	4	0
Fabric	5	5	0
Services	5	2	1
No Reply or Unusable	5	4	1
Tools	4	4	0
Cable	4	4	0
Environment	4	3	1
Ceramics	2	1	0
Weapons	2	1	1
Education	2	1	0
Food	1	0	0

TABLE 3.1

Source: Developed by Researcher

if the respondents had provided more information. A large percentage of the handwritten notes were very short and too non-specific to determine which category would have made a better fit. For instance, a company may have stated, "spare parts" as their response to What is the Primary Product or Service of your company? Unfortunately it is not known whether this part is used on an aircraft or a boat. Therefore, many of the categories are designated as they are because of coarse responses.

2. Good or Service

The purpose of this topic was to see what kind of mix of manufacturing and service industry is present in DCMC Springfield's territory. Overwhelmingly, Northern New Jersey is an industrial environment. This will be even more evident when viewed with the breakdown of SICs in the next section. One hundred eighty-two, or 88.3% of all respondents, stated they have a contract for goods vice services (Figure 3.1). On one hand, this appears obvious to anyone who has traveled through the territory. As one draws near to New York City via Northeastern New Jersey, one notices the dense structure of smokestack businesses.

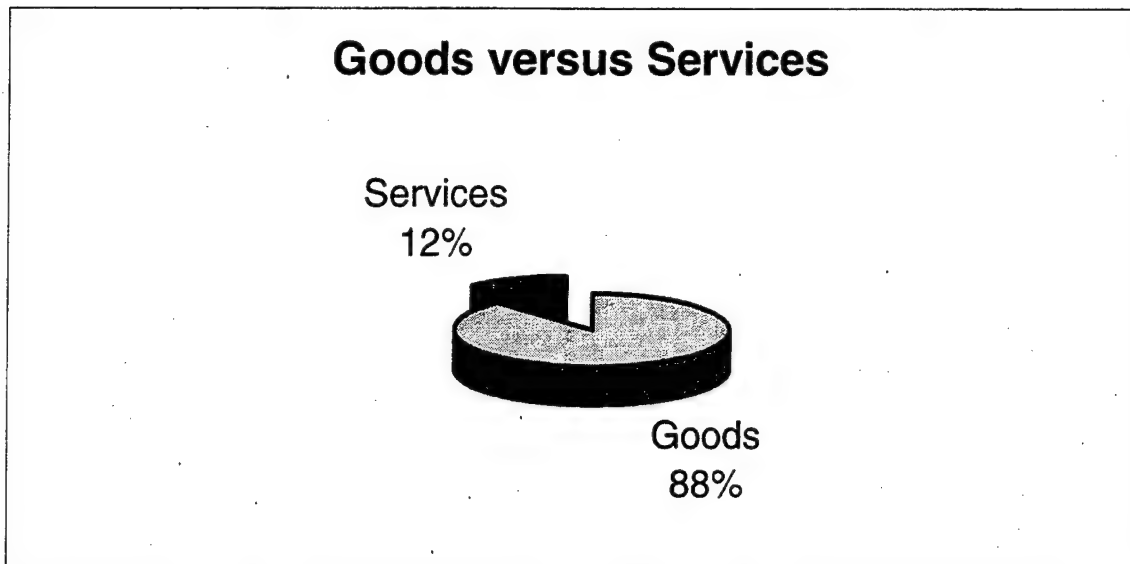


Figure 3.1 **Source: Developed by Researcher**

A large response indicating "goods" was expected, however the percentage was larger than anticipated, as the researcher believed that the Government's push to outsource work would have caused a higher percentage than received on the service side. As the Government moves to outsource more and more, the first candidates for outsourcing are in the service sector. It appears this area of the country is so concentrated with factories that it may not be fully participating in the service outsourcing movement.

Not only is the DCMC Springfield's vendor base known for its industry, it is also staggeringly dense in proximity of one company to another. Using a map of the state of New Jersey, the researcher plotted the cities of all 891 active contractors. A 30 mile radius was drawn with its center in downtown Manhattan. This produced a semi-circle in New Jersey that held 545 companies. Not only does this represent 61% of all the contractors in a relatively small area, but also the amount of vendors within one particular city limit was huge. Cities such as Newark, Paramus, Hackensack, Passaic, Paterson, Hawthorne, Wayne, East Rutherford, Englewood, and Union have ten or more factories each. Leading them all was Fairfield with 34.

One could say the New Jersey industrial base is heavily concentrated across the Hudson River from our largest city, New York City. This is illustrated in Appendix B, which is a copy of the New Jersey state map showing the densest portion of New Jersey's suppliers. Not shown, but next in concentration, is the area outside of Fort Monmouth and Naval Ammunition Depot Earle. This area is not nearly as dense but does show the ability of

military bases to attract businesses right outside their gates.

DCMC Springfield's former location of Springfield, New Jersey placed it within the borders of the semi-circle mentioned above. Its new location on Picatinny Arsenal is ten miles outside the boundary drawn by the researcher. It was not feasible to move farther into the circle because of the need to relocate onto Government-owned property. DCMC Springfield had two locations to choose from, Picatinny Arsenal or Fort Monmouth. Picatinny Arsenal was the better choice due to the quicker access Picatinny Arsenal affords to the heart of DCMC's clientele.

3. Standard Industrial Classification Codes

One hundred forty respondents provided their primary SIC. Fifty-seven did not provide a response and nine appear not to have understood the question. SICs have four digits, all numeric. The researcher received responses of three and six digits in addition to random letters mixed in with the numbers for some replies. Fortunately, these nine and the 57 who did not provide a SIC answered survey

question 1.a. and the researcher was able to estimate the appropriate SIC when needed for later analysis.

The 140 responses covered 93 different SICs. The vast majority of all SICs were represented just once. Only one SIC stood out, 3679, which is "electrical components," having been noted by 11 different contractors.

SICs are divided into like categories for further classification. The first major category is the Division. All SICs are divided into 11 Divisions, A through K (Table 3.2). In turn these divisions are subdivided into Major Groups, notated by the first two digits of the SIC. After an item is Divided and Grouped, it is then defined by the remaining two digits to complete the transition from the general to the specific.

The predominant Division in DCMC Springfield's vendor base is D (Figure 3.2). With 104 of the 140 responders providing SICs in this Division, it is safe to categorize Northern New Jersey as an industrial area composed of manufacturing plants and factories. The next largest Division is F, at a distant 14 responses. Division F is not a far stretch from Division D as both are in goods; those in D manufacture them while those in F sell them.

STANDARD INDUSTRIAL CLASSIFICATION CODES BREAKDOWN

<u>Division</u>	<u>SIC numbers</u>	<u>Title</u>
A	0000 - 0999	Agriculture, Forestry and Fishing
B	1000 - 1499	Mining
C	1500 - 1799	Construction
D	1800 - 3999	Manufacturing
E	4000 - 4999	Transportation, Communications, Electric, Gas and Sanitary Services
F	5000 - 5199	Wholesale Trade
G	5200 - 5999	Retail Trade
H	6000 - 6999	Financial, Insurance and Real Estate
I	7000 - 7999	Services
J	8000 - 8999	Hospitals, Legal, Education Social Services, Museums, Zoos, Engineering Services
K	9000+	Nonclassifiable Establishments

Table 3.2

Source: FAR Part 19

Standard Industrial Codes Found in DCMC Springfield Survey

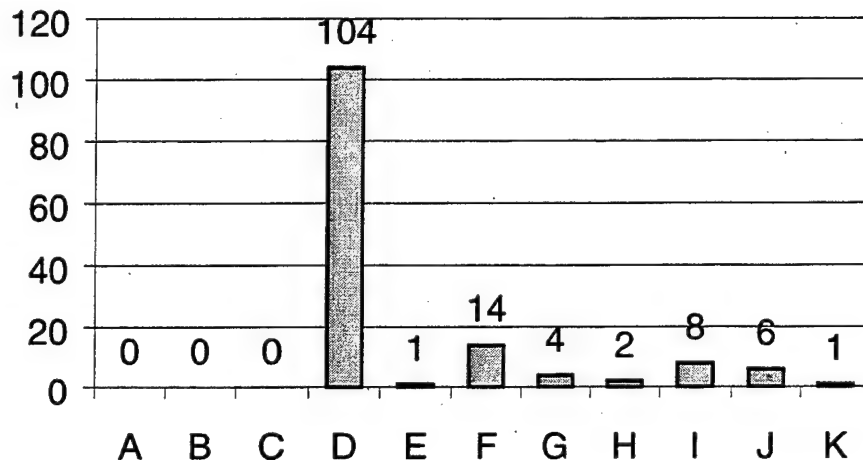


Figure 3.2 Source: Developed by Researcher

In Division D there are 22 Major Groups, numbered as series 18 through the series 39. Fourteen numbered series, of D's 22 Major Groups, are found in the SICs of DCMC Springfield, the most popular being Major Group 36. Major Group 36, also known as "Electronic and Other Electrical Equipment and Components, Except Computer Equipment" has 12 SICs represented in this study. Twenty-seven companies identify themselves amongst the 12 SICs found in DCMC Springfield's responders in Major Group 36.

4. Years in Operation

New Jersey is one of the original thirteen states. As such it has a long history. One would expect to find a mature vendor base. The responses indicate a range of two years for the youngest company and multiple responses over one hundred years old, the oldest being 172 years in existence. The average age of a Northern New Jersey respondent is 40.8 years. Contrast this to an area such as the one an hour North of the Naval Postgraduate School, Silicon Valley, and you will find drastically different results. For such an area, one would expect companies less than a year old representing the youthful side and mature companies in the twenties, and an average hovering around ten years. This would be quite different than what the researcher found in New Jersey.

5. Number of Employees

A survey question was presented to determine the range of employee pool size and to confirm responses where a company indicated they were a small business. Using Part 19 of the Federal Acquisition Regulation (FAR), one can

cross the number of employees with their SIC to identify compliance as a U.S. Government recognized small business.

At a glance, one can see the employee pool size appears as one would expect for an area dominated by small businesses (Figure 3.3). One hundred and eighty-three of the 204 businesses have less than 500 employees, the most common factor in identifying a small business. In fact, over half of the companies have fewer than 50 employees.

The number of businesses that appear to be small businesses by numbers of employees, 90%, exceeds the actual number of companies that identified themselves as small businesses, 77%. This leads the researcher to speculate that several of the companies with small employee pools have significant revenues, enough so as to remove them from recognition as a small business when revenue base is the deciding factor. When one takes into account that many of the manufacturing SICs permit more generous employee bases of 750 and 1000 employees, this appears to confirm the speculation. The other possibility is that some companies eligible for recognition as a small business chose not to do so or are not aware of the opportunities afforded them by this designation.

Number of Employees

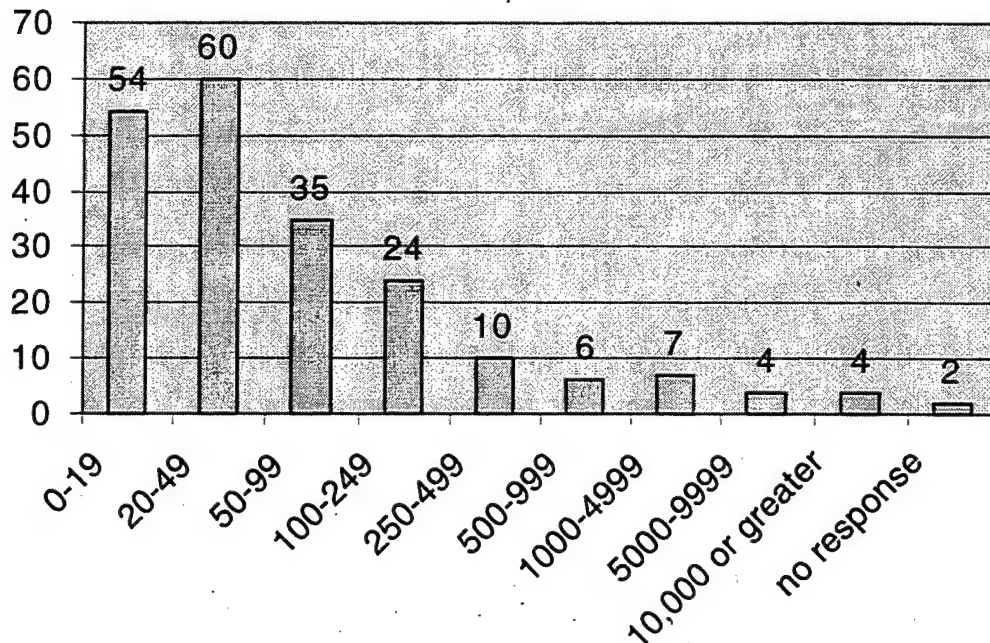


Figure 3.3 Source: Developed by Researcher

6. Annual Sales

Figure 3.4 shows that annual revenue for the DCMC territory is robust for the many small companies that occupy it. Ninety percent of all companies had revenue over one million dollars. The largest category, with 68 responses, "\$1 million through \$5 million," fits with the image of the small company. The most common discriminator,

other than employee pool size, in FAR Part 19 was sales of less than \$5 million for consideration as a small business.

Annual Sales in Dollars

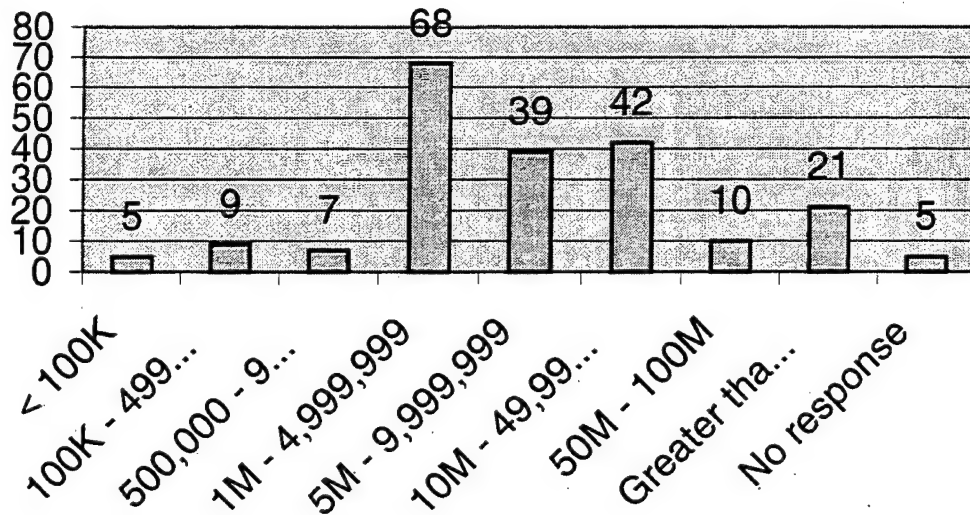


Figure 3.4 Source: Developed by researcher

7. Total Value of All Active Contracts with DOD

The respondents were asked what is the total value of all active contracts they have with DOD. The replies are organized in a range from "under \$500" to "greater than \$5 million" to determine if the average contractor in DCMC

Springfield's cognizance is on the high end or low end of the spread of dollar values. Judging by the even spread amongst the responses (Figure 3.5), it is difficult to pin a statement on the vendors.

Dollar Value of Active Contracts with DOD

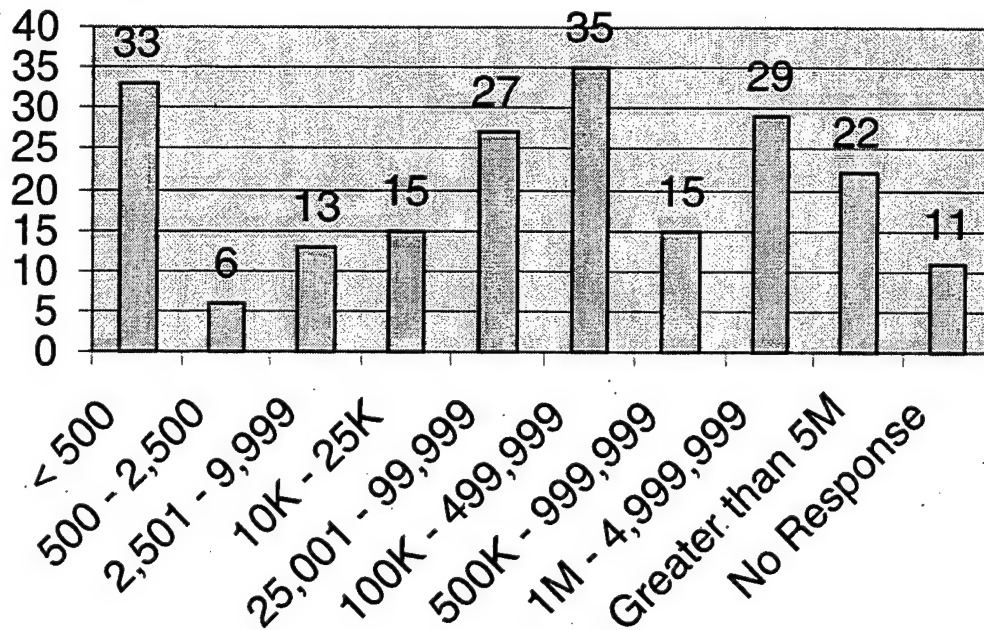


Figure 3.5 Source: Developed by Researcher

One item that stands out is the second largest response, "less than \$500." This indicates to the

researcher that one of two things may be happening. First, historical addresses were not scrubbed from the vendor database before DCMC Springfield gave it to the researcher. These vendors may have had a contract within the last fiscal year but no longer have any contracts with DOD. Second, between the time the address listing was generated and the time the surveys were formed, mailed, received, and returned, deliveries were made and the contractor had no other contracts open with the Government at the time (s)he completed the survey.

Either way, the most likely reason for this result is that the contractor had zero contracts, hence zero value. It is unlikely so many contractors had some amount of dollars on active contracts between 0 and \$500. Supporting this notion is a cross-examination of this question with survey Part II, Question 4 concerning the number of contracts with a vendor awaiting closeout.

Of the 33 contractors that indicated a response of "less than \$500" for the dollar value of contracts they have with DOD, 28 indicated they have zero contracts awaiting closeout. The other five may have completed their contracts and are waiting for finalization, therefore it is very likely that these 33 contractors do not have an active

contract as of the time of this writing, but they had a recent contract and were willing to reply regardless.

8. Percentage of Business with U.S. Government

The desired effect of this question was to determine to what extent the vendors in this territory depend on the Government for their existence. The researcher found that these vendors are not dependent on the Government for survival. The largest two slivers represent 71% of the circle, showing relatively little dependence on the Government (Figure 3.6). The two smallest wedges, representing high dependency on the Government, only amount to 15% combined.

One might ask that if this result is valid for the population as a whole, where do small, disadvantaged businesses (8a) fit into this scheme? Would they not, by their nature, be dependent upon the Government as their source of existence?

Percentage of Business with U.S. Government

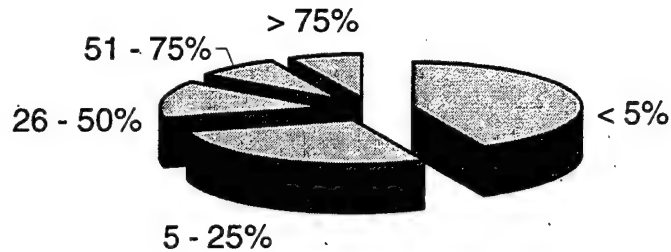


Figure 3.6 Source: Developed by Researcher

This is not the case (Figure 3.7). It appears the sixteen companies that identified themselves as 8a firms do not depend on the Government for their existence and should the Government revoke their status, they are likely to continue operating unhindered. Only two companies, as indicated by near total dependence on Government contracts, would struggle if their ability to draw Government preference was affected. A full 50 percent of the 8a firms do almost no business with the Government. The researcher

learned that the "8a" designation is not necessarily a means of income distribution for the disadvantaged as much as a means for companies who otherwise may not be able to do business with the Government to have an opportunity to do so.

8a Companies and Their Dependence on Government Contracts

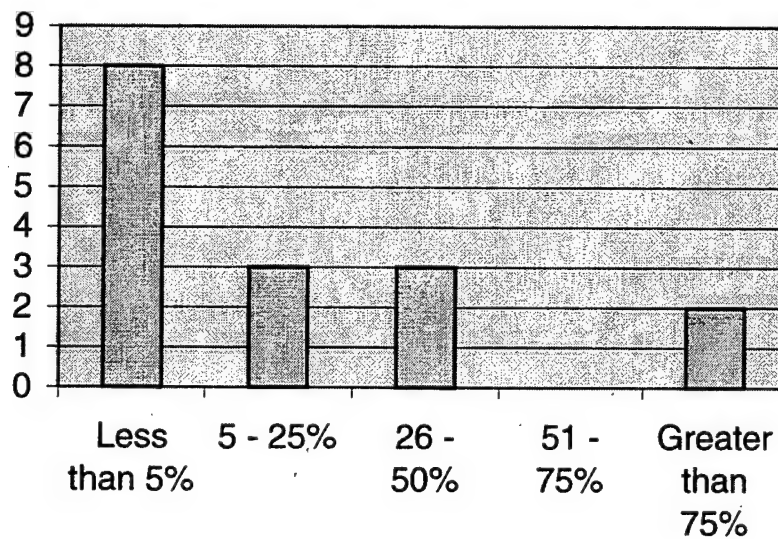


Figure 3.7 **Source: Developed by researcher**

9. Monopoly, Oligopoly, or Full Competition

One survey question was posed to determine in what environment companies operate. One would expect to see a free market in such an industrial environment and it appears this is the case. One hundred seventy-six, of the 203 vendors who replied, believed they had no ability to set prices for the industry, that many others could make the same goods they do, and overwhelming barriers to entry do not exist (Figure 3.8).

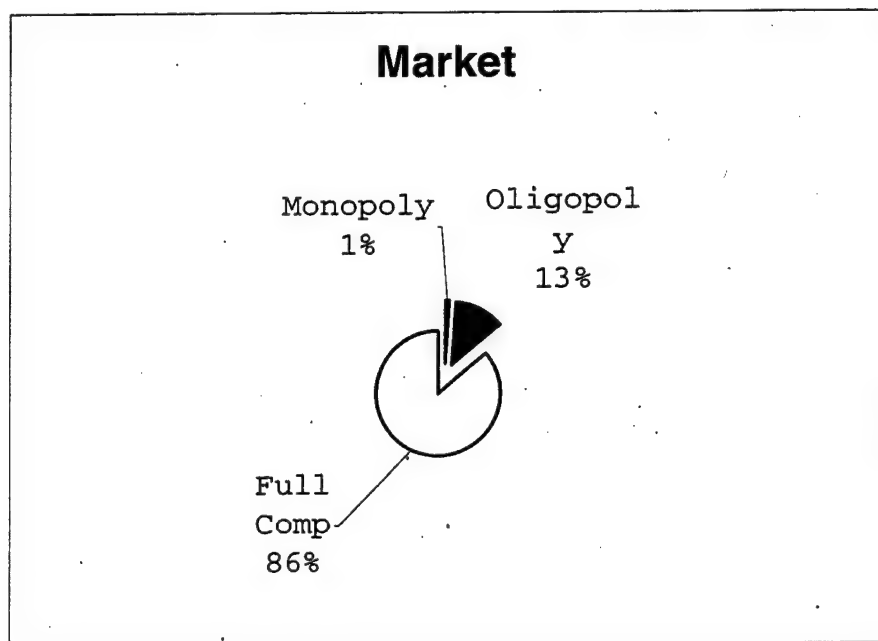


Figure 3.8 Source: Developed by Researcher

The one company that claimed to be a monopoly manufactures Marine Diesel Engines. This does not appear to be an area ripe for a monopoly, such as Cable Television or a utility. Couple that thought with the fact this company indicated they are a small business, have less than 20 employees, and annual sales under \$500,000 (not typical attributes of a monopoly) and it appears they are likely mistaken. An analysis of the types of goods produced by the 26 respondents to "oligopoly" reveals a similar situation. If one could spend the time to fully analyze the market conditions facing these companies, it is likely that the 87% noted as "full competition" is probably an underestimate.

10. Small Businesses

Perhaps the most important question on the survey was whether a company was a small or large business. This piece of information became the basis for Chapter V and factors into much of the analysis of Chapters III and IV. The percent of small businesses in the DCMC Springfield region is as defining a characteristic of this area as the percentage of businesses that are manufacturers of goods.

Seventy-seven percent of the respondents indicated they were a small business (Figure 3.9). As mentioned earlier in the discussion of the employee pool size, it is the belief of the researcher that this number is an underestimate.

The large companies of note in Northern New Jersey are GEC-Marconi and ITT. The other large companies are not as recognizable. The small companies on the survey mailing list reads like a cross section of the yellow pages - many family owned businesses and lesser known factories.

In this respect, Northern New Jersey is like the rest of the country, dominated by small businesses. The U.S. Government spends a lot of resources to ensure the survival of small companies. The success of those programs appears to be alive in the DCMC Springfield territory.

Table 3.1 provides some insight to which classification of goods DCMC Springfield's small businesses belong. Two of the largest categories, "Electronics" (90%) and "Nuts, Bolts, Gaskets, Washers" (88%) had more small businesses than the populations average of 77%. Six of the smaller categories were composed of 100% small businesses: "Spare parts," "Communications," "Computers," "Fabric," "Tools," and "Cable."

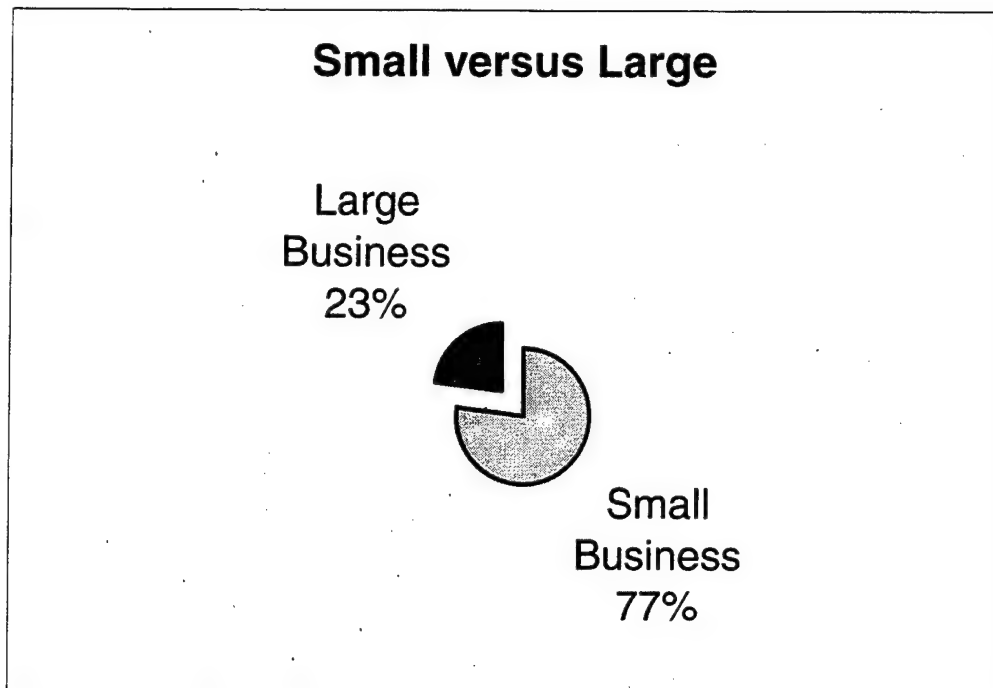


Figure 3.9

Source: Developed by Researcher

11. 8a Firms

The survey question concerning 8a firms was a sub-category of the question that preceded it. Once a company identified themselves as a small business, the researcher wanted to know which of them were small, disadvantaged businesses. Sixteen 8a firms responded to the survey, meaning approximately 8% of DCMC Springfield's vendors are small, disadvantaged companies.

What goods or services do the 8a firms provide for DOD? Interestingly, all sixteen 8a firms stated they produced goods. Not one indicated they were in the service sector. If one views the SICs indicated by these companies, one sees no two 8a firms alike. Sixteen companies, - sixteen SICs, ranging from carbon brushes and electric motors to flexible shafts.

12. Subcontracting

Information obtained for this section was used to see how much work for the Government these contractors are performing beyond the amount they claimed in Section 7 (Total Value of All Active Contracts with DOD). A surprising 44% of the contractors replied that they perform subcontract work on Government contracts (Figure 3.10). This makes it appear that Government work is more prevalent than the statistics of Section 8 (Percentage of Business with U.S. Government) alone would indicate. If a company does not have an active Government contract, it is possible they still have some relationship with the Government.

Examining the companies that replied they were heavily dependent on the Government (greater than 50%) for their

businesses in Section 8, one could ask where these companies fit in the subcontracting world? Ninety-nine companies indicated subcontracting was part of their business (Figure 3.11). Eighteen of these companies were among the vendors that indicated greater than 50% of their primary work was in fulfillment of Government contracts. So, in addition to heavy involvement with the Government on prime contracts, they also provide a substantial amount of subcontracted work for other Government contracts. The researcher deemed these 18 companies "saturated companies." These companies are truly focused on Government work.

Subcontract on Other DOD Contracts

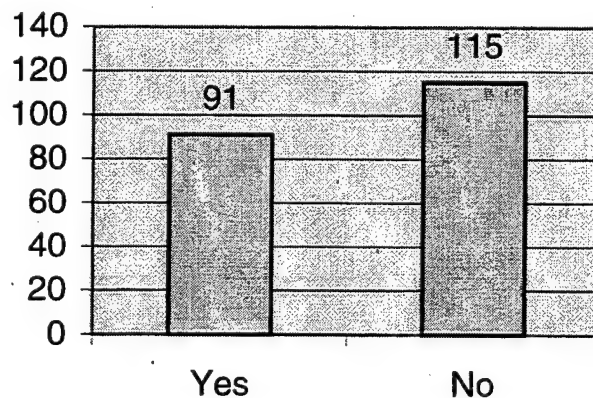


Figure 3.10 **Source: Developed by Researcher**

Of the 18 saturated companies, is there a trend regarding the goods they provide to the Government? Four SICs stand out. These four had two or more companies declaring that particular SIC, the remaining SICs are represented by just one company each.

Contractors with Subcontracts for Other DOD Contracts and the Percentage of Work They Get from DOD

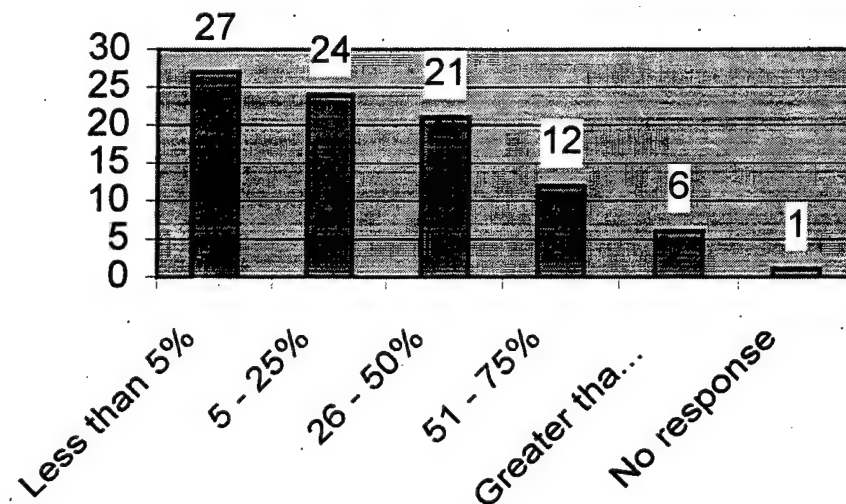


Figure 3.11 Source: Developed by Researcher

Standard Industrial Classification Code 3679, electrical components, appeared four times amongst the saturated companies but this is not deemed a trend exclusive to saturated companies as this was the most popular SIC in the whole territory. The other three SICs, 3728 (Aircraft parts), 3812 (search, detection, and navigational instruments), and 8711 (engineering services) had two representatives each among the saturated companies. Besides the appearance of these four SICs in the saturated companies, DCMC Springfield's territory also had non-saturated companies with these same four SICs, so this cannot necessarily be called a trend.

Do the SICs represented in the saturated companies follow the downward trend for Government business? If a company is very heavily dependent on the Government, it is logical that these companies would have been subject to the same downsizing fate that hit DOD. At first glance, this appears true as 10 of the 18 (56%) saturated companies indicated their business with the Government fell in the last five years.

This percentage must be compared to all respondents' replies to make a valid analysis. Figure 4.11 shows 50% of all companies reported that their DOD business fell during

the last five years. These figures are virtually the same. It cannot be said that because a company is heavily dependent on the Government that it suffered a downturn worse than the population as a whole.

13. Foreign Sales

Originally, the survey question that asked if a company had significant foreign sales was going to be used in conjunction with the question about decreasing business. The idea was to determine if foreign sales picked up the slack, provided that the researcher discovered Northern New Jersey vendors were heavily DOD dependent, and suffered a serious loss of sales due to a down-sizing military. Since it does not appear this geographic region is heavily dependent on DOD and the fact that there is not another question to bridge the findings on foreign sales, the statistics are presented below for informational purposes but will not be further analyzed.

Twenty-two percent of the respondents have a healthy participation in the upcoming world economy (Figure 3.12). "Significant foreign sales" was listed as "greater than 25%" for purposes of the survey question. If New Jersey

can adapt its existing factories with newly found technologies, perhaps a study in a few years will find this percentage has gone up. There is a bridge in Camden, New Jersey with a sign that reads, "Camden makes, the World takes." The manufacturers of New Jersey are aware that they are global providers of goods.

**Significant Foreign Sales
(Greater than 25% of all sales)**

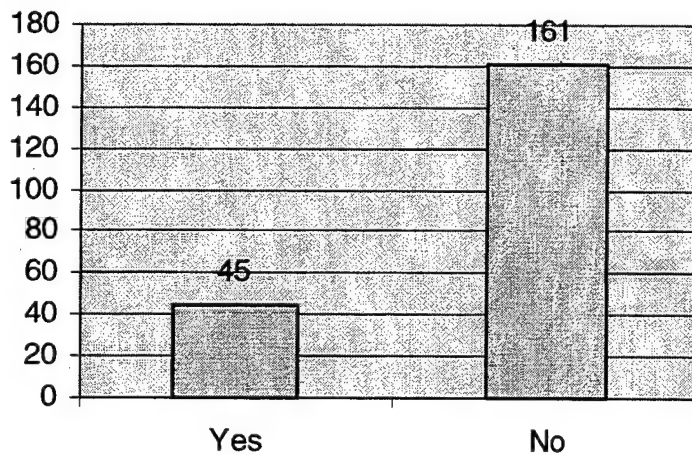


Figure 3.12 **Source: Developed by Researcher**

C. SUMMARY

This chapter presented the findings and analysis from Part I of the researcher's survey. Part I had ten numbered questions, some of which had sub-questions, for a total thirteen questions. Chapter III followed these thirteen questions in the order presented in the survey. The information presented in Chapter III begins to paint a picture of the contractors in Northern New Jersey. These contractors typically are small businesses, manufacturers, non high-tech, and independent of Government ties.

The next chapter picks up where this chapter stopped. The material from Part II of the survey will be presented and analyzed. Additionally, Section D will attempt to explain the large number of rejected mailings from the U.S. Post Office.

IV. ACQUISITION QUESTIONS

A. INTRODUCTION

This chapter presents and analyzes the data that were collected concerning the survey population's contracts with the Government. All material presented here used Part II of the survey as its source.

The objective of Part II of the survey was to conduct a study of the contractual relationship of contractors currently doing business with DOD. The goal of this section is to give a broad picture of the average vendor in Northern New Jersey.

B. PRESENTATION OF SURVEY DATA FOR PART II

The following data are the results of the second part of the survey. Six numbered questions covering eleven topics were asked about each company's current contracts with the Government. The survey is presented in Appendix A.

1. ISO9000 Certification

The first survey question of Part II provided an additional response over the typical "yes" or "no," by adding "no, but working towards" and was presented as:

1. Is your company ISO9000 certified?

It was important not only to determine participation in ISO9000, but also to identify if a contractor was working toward certification.

Unfortunately, the largest response was "no," but it is encouraging to see "working towards" as the next highest response (Figure 4.1). Forty-eight percent, nearly half, of all respondents are neither qualified nor are they planning on becoming qualified in the near future. Fortunately, the 20% who said "yes" and the 32% who said "working towards" means that by the time these companies finish certification, the answer "yes" should outnumber the answer "no."

The low response for certification can tell us that either ISO9000 certification is not important to the firms in Northern New Jersey or that as many as half of the respondents have not heard of ISO9000. ISO9000 has been highly visible throughout the 1990's, so it is unlikely

that these companies are unaware of it. It is more likely that they choose not to participate because, as a business decision, it may not be worth qualifying. ISO9000 is very expensive and takes a considerable amount of effort and time. Most of these companies may be aware of ISO9000 but cannot justify the expense necessary to become registered.

ISO 9000 Certified?

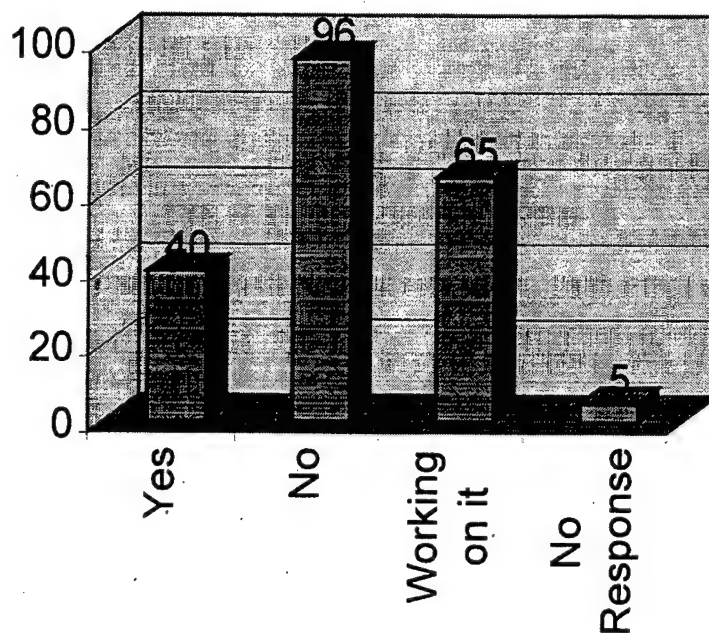


Figure 4.1

Source: Developed by Researcher

ISO9000 certification can help both the company and the Government. For the company, ISO9000 can mean survival. Quality is an indispensable element of competition. As the global economy grows, companies with ISO9000 certification will be ready to compete effectively. The non-certified companies may find they receive less business as corporations turn only to other corporations within the brotherhood of ISO9000.

The Government benefits because ISO9000 can aid the Government in a downsizing acquisition workforce. DOD is attempting to use less oversight where possible [Ref. 15]. ISO9000 certified companies might be a good place to start. The assurances of certification and the constant upkeep to maintain certification should translate into less inspection required of the Government.

Table 3.1 indicates that ISO9000 is critical to several of DCMC Springfield's vendor classification categories and yet of no interest in other categories. "Engines, Gears, Valves" had the most qualified vendors with a total of five. These five qualified companies make "Engines, Valves, Gears" 28% ISO9000 qualified, which is greater than the population average of 20%. Several

categories are notable for their push to achieve qualification. "Electronics" has 50% of its vendors working on ISO9000 certification. "Aerospace" has 60% already qualified and the remaining 40% all indicated they were working toward certification. "Metals" and "Rubber" will each have 72% certification once the contractors who indicated "working toward" are finished. This indicates to the researcher that these fields are the ones where certification is important for vendors to attract business.

Mixed with this positive aspect is the fact that six categories have no ISO9000 certified vendors: "Spare Parts," "Communication," "Research & Development," "Fabric," "Tools," and "Cable." This indicates ISO9000 is either too expensive to achieve, not important to these fields, or they may not be working on ISO9000 series certification, but another ISO series which was not asked about by the researcher.

2. Selected Contract Arrangements

The researcher wanted to present the survey participants with a question that would offer them four topics to determine what experience they had with non-

routine contracting issues. The four topics covered issues that one would not find in the average, low dollar value, firm fixed-price contract. The question asked,

2. Do you have contracts with the Government for which the following apply:

- a) Process Oriented Contract Administration Services (PROCAS)?
- b) Forward Pricing Rate Agreements (FPRA)?
- c) Cost Accounting Standards (CAS)?
- d) Progress Payments?

Participation in PROCAS and FPRA is low. By contrast, Progress Payments and CAS are found far more frequently amongst DCMC Springfield's vendors. Although these two items are more likely to be used than the previous two mentioned, they are still not commonplace, as neither Progress Payments nor CAS was found in more than a quarter of the respondents.

a. Process Oriented Contract Administration Services.

Figure 4.2 shows that participation in PROCAS activities is almost non-existent with a mere 3% of the population involved. Not only do DCMC Springfield's vendors rarely employ this recently developed initiative, but PROCAS was also one of the least understood questions

in the entire survey. The question concerning PROCAS frequently had question marks drawn on the survey where a check mark would have gone to indicate "yes" or "no." This implies that many of the respondents have not heard of PROCAS or do not understand it.

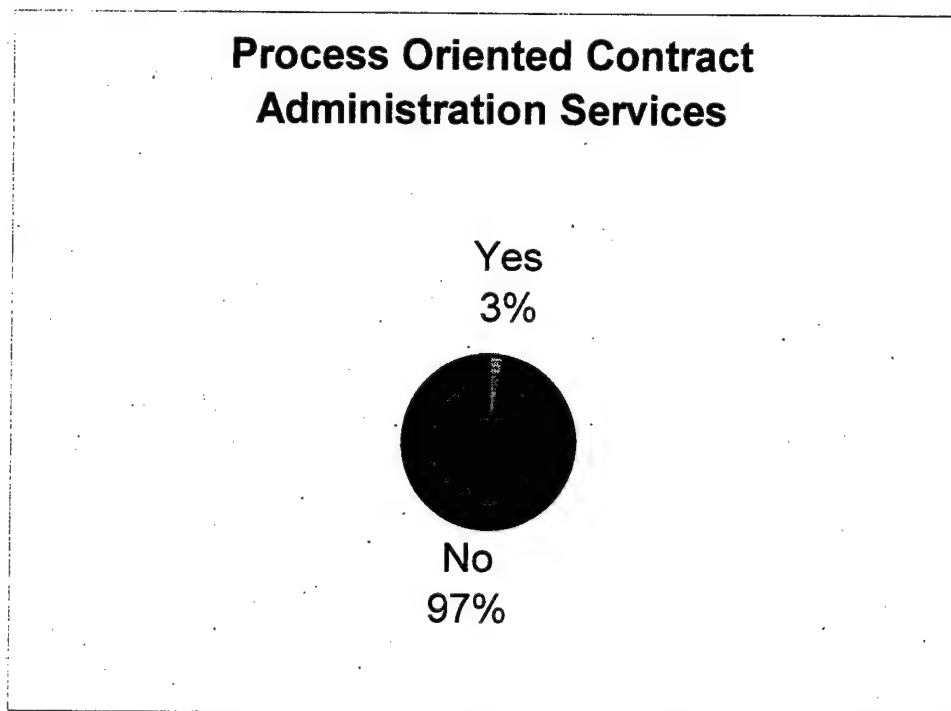


Figure 4.2 **Source: Developed by Researcher**

The fact that so few companies use PROCAS is disturbing. Private enterprise complained that the Government was not doing enough for them. For reasons such

as this and similar feedback, the Government created programs like PROCAS. If the Government is offering special assistance like PROCAS and private enterprise is not taking advantage of it, we are wasting a lot of potential benefit. On the other hand, if private enterprise wants to use PROCAS, but just does not know about it, the Government could be criticized for not spreading the word more effectively. DCMC Springfield needs to educate its customers on how PROCAS could be of benefit to them.

b. Forward Pricing Rate Agreements.

Figure 4.3 shows participation in FPRAs. The results are very similar to PROCAS, only slightly higher. This implies that PROCAS and FPRAs are seldom used on contracts with Northern New Jersey vendors due to the nature of the businesses in this region. Small businesses often have smaller dollar value contracts than larger businesses. PROCAS and FPRAs are not common because small businesses do not require either of these to perform their contracts.

The researcher hopes that the low usage of FPRAs is because it is not required, as in the case of Firm-

Fixed-Price contracts. If this is the case, then FPRAs are not being neglected. This would be the preferred explanation compared to the reason for low usage being caused by lack of initial effort.

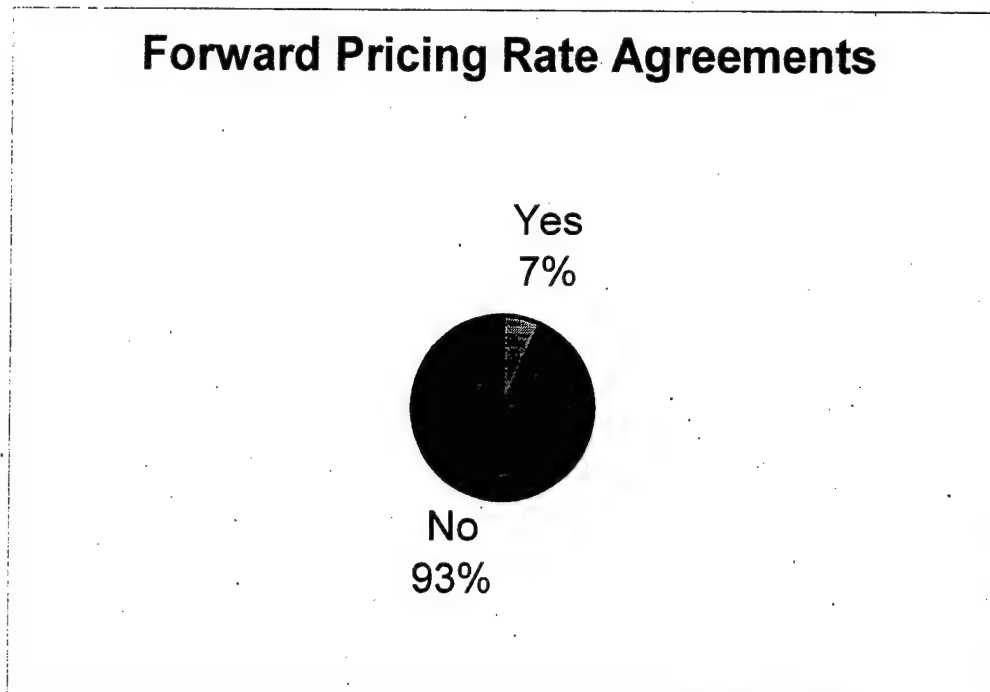


Figure 4.3 **Source: Developed by Researcher**

c. *Cost Accounting Standards.*

The researcher expected Progress Payments (21%) to be the most common response of the four topics, however the researcher was surprised to see more respondents

subject to CAS. Forty-nine respondents (24%) replied they had contracts for which CAS applied giving CAS the largest percentage of the four topics of this question (Figure 4.4). Considering how many small companies are in the study group, it was expected that contracts with these firms would not be subject to CAS.

From a contractor's point of view, CAS is one of the most disliked areas in dealing with the Government [Ref. 16]. CAS forces many contractors to maintain accounts they would not normally maintain in the private sector or it forces them to keep two sets of records just to satisfy Government requirements. Vendors would just as soon not spend the time and expense to comply.

The 24% of companies involved with CAS would benefit from a relaxation of CAS and hopefully this would translate into better prices for the Government. The potential drawback is the risk of unallowable costs making their way into Government contracts once a company knows the Government will not be holding them to former Government standards.

DOD has taken the position that free market forces will govern our future relations with the industrial base

[Ref. 17:P. 2]. If this turns out to be true, one of the first things the Government will need to do is adopt commercial accounting standards and start to free itself of all the Government unique standards. This will affect administration commands by reducing the number of personnel required on the staff who are trained in Government accounting. When the current workforce reaches retirement age, DCMC could hire Certified Professional Accountants without the added cost of retraining them.

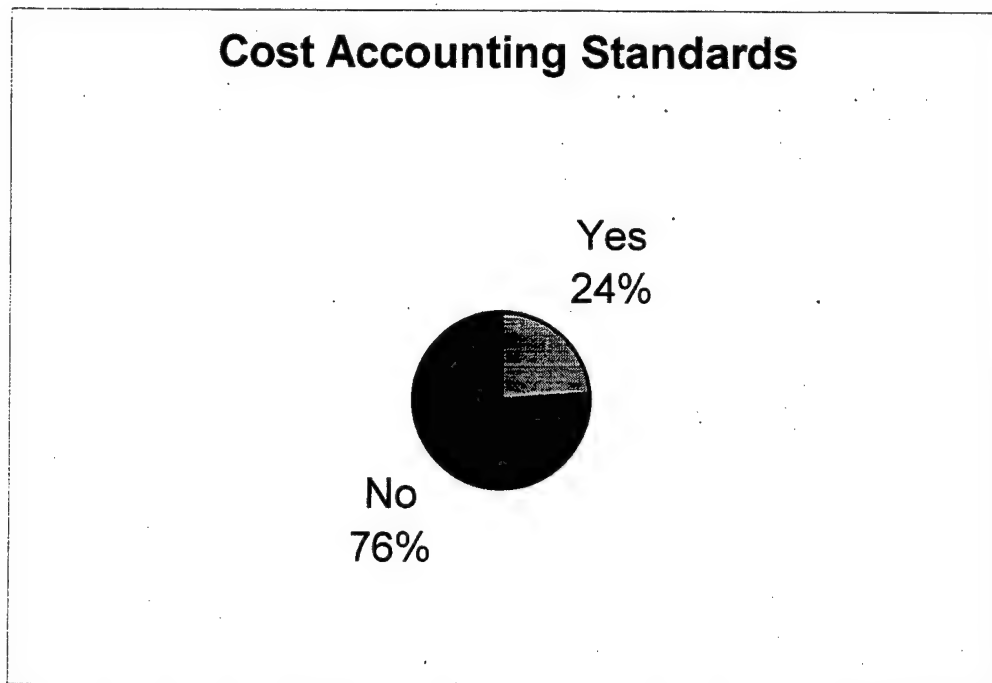


Figure 4.4

Source: Developed by Researcher

d. Progress Payments.

Receiving Progress Payments was expected to be a common finding. After all, what company would not want to receive Progress Payments; money now is better than money later. With that in mind, the percentage of those receiving Progress Payments was expected to be higher (Figure 4.5). One potential reason it is not higher than 21% of those replying is because the Government does not agree to provide financing in the form of Progress Payments in all contract situations. Another possible explanation is that the majority of awards are small dollar value awards or are of very short duration and therefore do not warrant progress payments.

A Contracting Officer is under no obligation to provide Progress Payments and needs to make a business decision on a case-by-case basis on whether to grant them. As much as every contractor would like to be financed prior to contract completion, the Contracting Officer must decide if this is in the Government's best interest.

Financing contractors through progress payments costs the Government money that could be used elsewhere and is no guarantee that the contractor will finish. Payment is based on costs incurred, not progress made. By paying

up front, the Government runs the risk of overpaying a contractor and possibly never recouping the money, as in some cases of contractor default.

Knowing the percent of contractors receiving progress payments can alert DCMC to the potential of payment problems. If this percentage increase, DCMC can expect to receive more complaints from its vendors about pay problems. By tracking the percentage of vendors receiving progress payments, DCMC can become more aligned with DFAS to pro-actively curtail the frequency of pay problems.

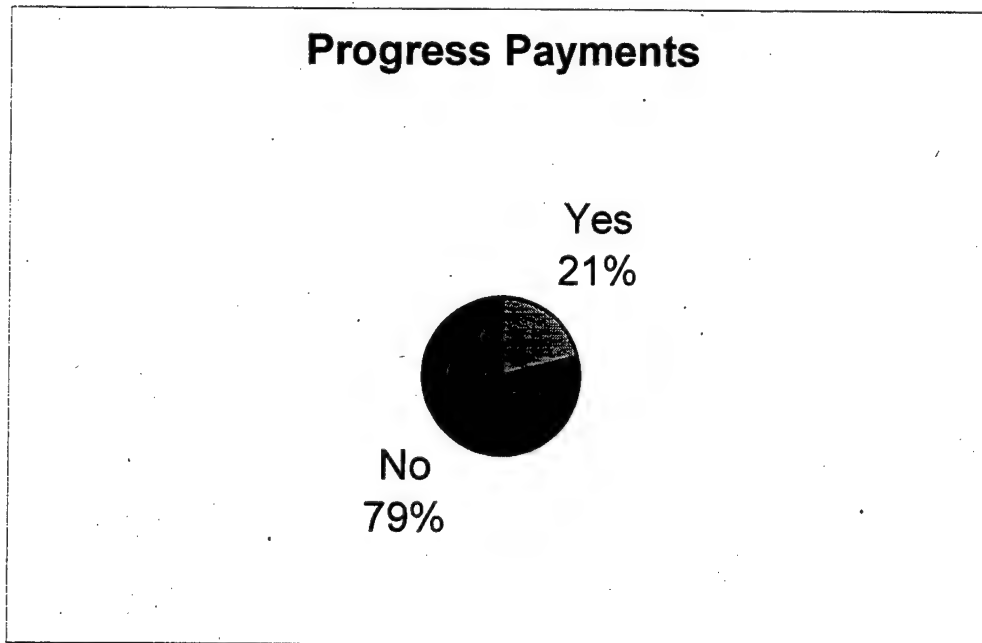


Figure 4.5

Source: Developed by Researcher

3. Prime Vendor

The survey question on Prime Vendor provided the following options to the participants: "Medical," "Subsistence," "Other," and "Do not participate." The question asked:

3. Do you have a contract with the Government that supports a Prime Vendor Program?

At the time of this analysis, there were only two recognized Prime Vendor programs, Medical and Subsistence. "Other" was added as a means to get feedback to see if contractors were working on a prototype Prime Vendor program or to see if they really understood the question. One of the upcoming areas where Prime Vendor is being considered is Hazardous Materials.

Of the eight replies (Figure 4.6) marked "other" it is possible one of these vendors is working with a Defense agency to start the next Prime Vendor series, but not likely. None of the eight companies that marked "other" are in the Hazardous Materials field based on the primary good or service they indicated. Most likely, these "other" responses resulted from misunderstanding the Prime Vendor program question. The other possibility is that a company

may be working on a developmental Prime Vendor contract for an area of procurement of which the researcher is unaware.

Prime Vendor

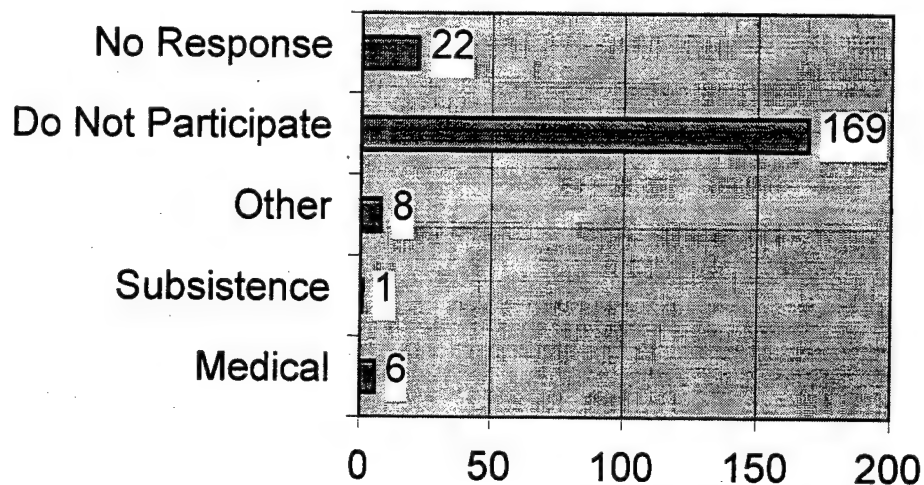


Figure 4.6 Source: Developed by Researcher

Interestingly, "other" was the most noted Prime Vendor choice at 4.3%, more than both Medical (.5%) and Subsistence (3.3%) combined. Over all participation in Prime vendor is considered to be very low. Once one removes the "other" responses, which are most likely in error, only 3.8% of the respondents participate in Prime Vendor. This is one area where a future study could expect to see more positive responses, as Prime Vendor appears to

be the future of acquisition for many of the non-core functions and goods the Government purchases.

Because Prime Vendor is not popular in the DCMC Springfield territory, the researcher recommends that DCMC should bring Prime Vendor to the attention of the many small businesses in this region. For instance, 11 companies indicated they are in the medical field, but only 6 contractors indicated they participate in the Medical Prime Vendor Program. Those vendors not participating should be provided with the knowledge of how they could become active participants in the Program.

Since Medical Prime Vendor is the most common Prime Vendor Program, it would be beneficial if the DCMC personnel administering these contracts had an understanding of the pharmaceutical market. Prior to the Medical Prime Vendor Program, it is likely that most contract administrators had no reason to be knowledgeable of this field. In order for Prime Vendor to work, the Government needs to exert more effort than perhaps needed in a standard procurement. Prime Vendor needs careful attention to succeed.

4. Contract Closeout

Contract closeout is often mentioned as a difficult issue in contract administration. It is widely believed that the Government is slow to close contracts once performance has been completed. With this in mind, question 4 sought to determine how critical contract closeout is for vendors at this DCMC by asking:

How many contracts do you have that are completed/delivered, but not closed out?

As shown in Figure 4.7, it appears that contract closeout is not a problem for DCMC Springfield. However, the overwhelming response of "none" (52%) for the number of outstanding closeouts is likely skewed by the number of vendors that took the time to answer the survey, but do not now have a current contract with the Government.

Nine percent of the companies replied "one" and 20% replied "2 thru 5." The researcher deemed the 81% of respondents, who were in the three categories indicating a total of less than five contracts awaiting closeout, as a positive sign for DCMC Springfield. However, further research should be performed to assist the vendors who replied in the "Greater than 10" category. At 13%, this

indicates several companies are having difficulties in reaching closure with the Government.

Contracts Awaiting Closeout

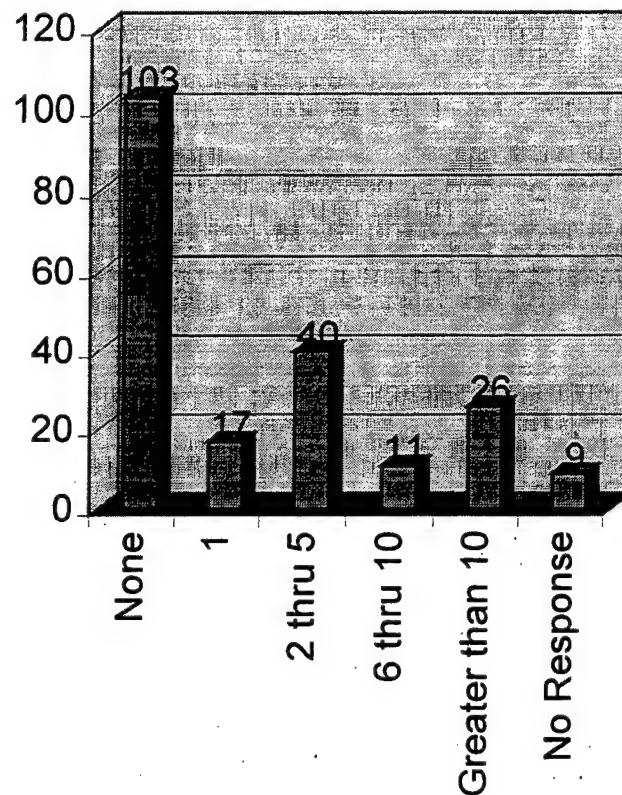


Figure 4.7 **Source: Developed by Researcher**

Slow contract closeout is not only the Government's fault. A contractor who is slow to close out his books and

provide final rates for overhead pools, is an example of a situation where the contractor contributes to the delay in closing out a contract. This scenario is out of the Government's control and may be just as likely a cause for the Government's backlog.

Knowing how difficult it can be to close contracts and noting how well DCMC Springfield appears to have performed, the researcher wonders if these figures are the results of a concentrated effort by DCMC to clear its backlogs. If so, DCMC Springfield's methods should be shared with other DCMC organizations.

5. Delinquent Delivery, Terminations, and Protests

The researcher was concerned it would be hard to get honest answers in response to this survey question because of the nature of the topics asked. Question 5 asked:

In the past 3 years, have you:

- a) Been notified by the Government that you were delinquent in delivery?
- b) Been terminated for default or convenience?
- c) Protested to the PCO, GAO, or ASBCA?

Because of this concern, the survey was confidential and anonymous. Because such a high number of contractors

were willing to provide point of contact information, the possibility of less than honest responses was considered to be great. Once identified, many contractors may not be willing to admit they were late in delivery or that they protested. They may be worried about tarnishing their reputations.

a. Delinquent Delivery.

The researcher believes the replies to the late delivery question are accurate since 20% admitted they have been late in delivery (Figure 4.8). This is considered to be a high percentage and appears valid, because inaccurate responses would have been lower. If the true percentage is actually higher, this should be cause for Government concern. As DOD shifts to a Just-In-Time mode of business, having greater than 20% of contractors with delinquent deliveries will have a significant impact. The Defense inventory system of the near future will be based on a process where warfighters that need parts will receive them just-in-time. This type of system will not work if we experience high delinquency rates. To be late in delivery, could make the difference in readiness.

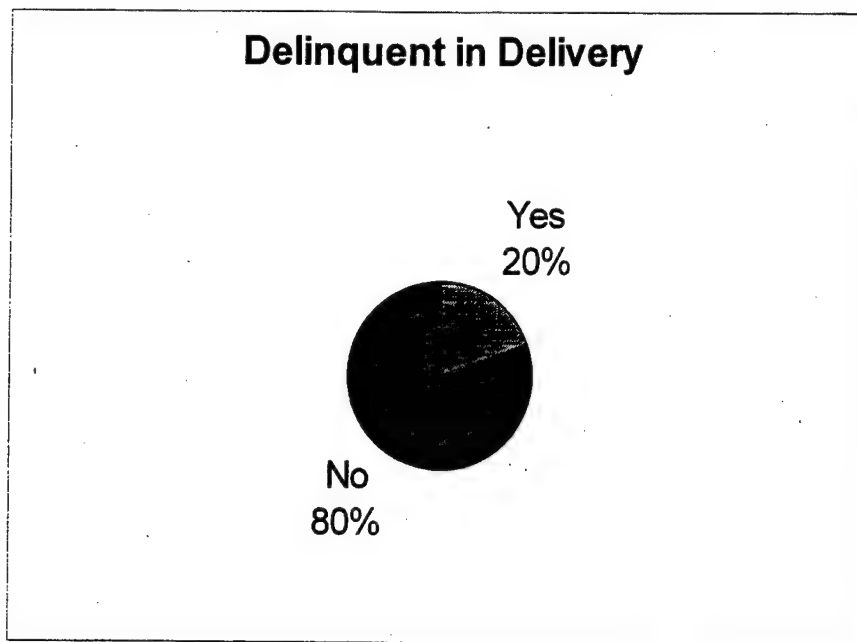


Figure 4.8 **Source: Developed by Researcher**

The researcher believes that these results should be of concern. If a buying command knew that 20% of contractors might delay shipment, they should certainly reexamine the source selection process. For their part, DCMC should review its procedures for handling delinquencies to determine if there is a trend that can be corrected. Also, it should be determined if timely follow-ups are conducted. If contract administrators are not acting in a timely manner, they are not protecting the Government's interest. The DCMC should further examine

what percent of these contract delinquencies result in ultimate failure to deliver or result in termination for default.

b. Termination.

Ninety-two percent of the respondents stated that they have never had a contract terminated. For the sake of the Government's reputation in conducting business, it is hoped that this percentage remains this high. If the system experiences several terminations, particularly for default, this severely strains the buyer-seller relationship.

It is not the low number of terminations that is at issue, but rather the ratio of terminations for convenience to terminations for default, 15:1 (Figure 4.9). The previous section on delinquencies wondered how often the delinquencies resulted in termination for default. If only one termination for default was identified, very few delinquent contractors are being terminated for default. One would think that out of the entire population surveyed, more than one company would have experienced a termination for default. Again, this is a potentially embarrassing question that many companies may be unwilling to admit.

It is not nearly as embarrassing to admit to a termination for convenience because it is usually not the contractor's fault. A termination for convenience is a Government decision. Somewhere in the chain of events the Government decided it did not need a good or service. The contractor may have, in fact, performed admirably. So, a company may be more than willing to admit to a termination for convenience.

Terminations

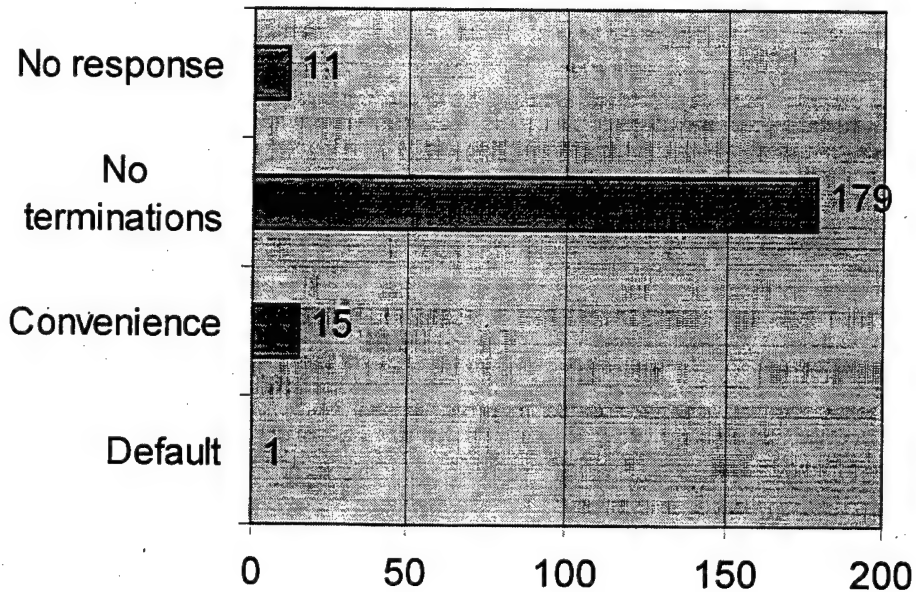


Figure 4.9

Source: Developed by Researcher

Terminations of any type are disliked by the commercial activities that deal with the Government. They are not involved with the concept of termination for convenience when they operate under the Uniform Commercial Code (UCC). Both types of terminations are messy. Rarely does a termination result in a satisfactory resolution for both parties.

There was only one termination for default. If this number is accurate, it is most impressive. This indicates that the DCMC Springfield vendors are very reliable for ultimate completion, despite their high delinquency rates. The overall low termination rate for this region gives the researcher the impression that these vendors must have good past performance records. The very low number of terminations indicates the Government can trust these vendors to complete their contracts.

Hopefully, the low number of terminations for default is not the result of the Government being lenient and allowing a potential termination for default to convert to a termination for convenience. This could indicate the Government may have contributed to the problem and the Government compromised by reducing the termination to one of convenience vice default.

c. Protests.

If the number of protests that occurs is a sign of whether the Government is making good business decisions or not, then the next graph is a good sign. Ninety-two percent of the respondents say they have not protested in the last three years to any of the outlets for protest (Figure 4.10). This is a comforting statistic since this indicates the majority of acquisitions in DCMC Springfield's territory are not held up pending resolution of a protest.

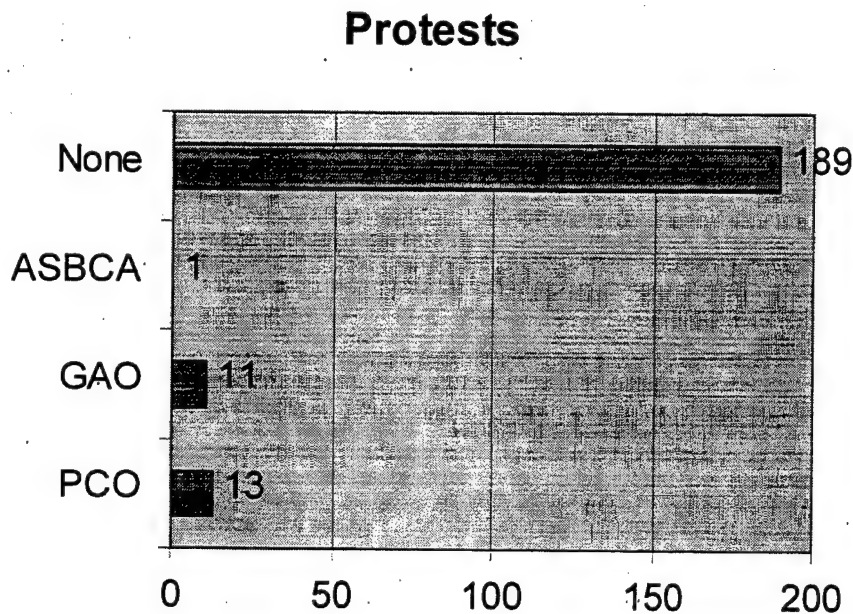


Figure 4.10 **Source: Developed by Researcher**

If less than 6% of all the vendors over the last three years filed a protest with the PCO, that appears to indicate the PCO can focus his/her efforts on other matters besides protests. The low percentage of contractors who protested to the PCO is more encouraging when one considers that each contractor has the potential for multiple contracts. Therefore, the percentage of all contracts that end in protest to the PCO is less than 6% when the "number of contractors" (in the denominator) is replaced by "total number of contracts" (unknown to this study).

6. Government Business Now Versus Five Years Ago

The survey had a question that asked:

Compared to five years ago, has the volume of business you do with the Government increased, decreased, or stayed the same?

This was the favorite question of the researcher because of the potential to hear straight from industry what has happened between them and the Government during these last five, turbulent years.

The most frequent response was "decreased" which was indicated by 50% of those who replied (Figure 4.11). The

DOD budget has dropped greater than 15% in the last five years [Ref. 18]. Because of the shrinkage in the Defense Industrial Base, it is only natural that "decreased" is the largest column in the graph.

Business with DOD Compared to 5 Years Ago

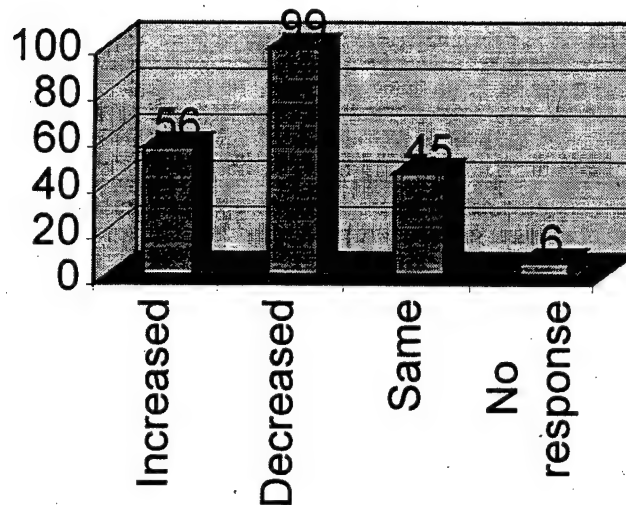


Figure 4.11 Source: Developed by Researcher

Surprisingly, the combination of "same" and "increased" combined for 101 replies making more than half of all vendors answering the survey no worse off for the

downturn in DOD acquisition spending. As it was shown in that analysis, the DCMC Springfield vendors are not heavily dependent on the Government's business. This would account for the fact that these vendors appear to be no worse off despite the downturn in DOD's acquisition budget.

One can speculate that as the Defense Industrial Base shrank in size, the majority of vendors in Northern New Jersey were not major players in the Defense Industrial Base. The other possibility is that these vendors provide goods that the Government still required even as its budget shrank. The former is more likely based on the respondents' reply to the question that asked them what percentage of their business was with the Government.

7. Other Comments

All the preceding information is valuable but it does not have any spark without providing the participants the opportunity to voice their opinion. Asking only "yes" or "no" type of questions does not give the respondents a chance to express themselves. For this reason, the researcher provided an optional section, located on the

last page of the survey, where the respondent could write a reply to:

...if you would like to bring any matter to my attention concerning the relationship between your company and the United States Government. Of particular interest would be recommendations for future studies that would improve the business relationships between the Government and Private Enterprise.

The surprising result of this section is how infrequently it was used for the intention the researcher was striving to attain. It was hoped that suggestions would flow back to the researcher for areas to explore in a potential second round of surveying or ideas that could be left behind for a future acquisition thesis to study. As it turned out, this addendum to the survey became a complaint session.

Fifty of the 206 companies (24%) who chose to participate provided a comment (Figure 4.12). Of those 50, only four provided a suggestion for potential further research. Eight companies used the blank space to clarify what their company does. The remaining companies spoke freely about their thoughts on Government procurement. An overwhelming 72% of all responses were negative. A mere 8% had something positive to say about Government acquisition.

Exploring the 36 companies that provided negative feedback, one can see trends developing. The three most frequent areas of complaint are (in rank order): Bureaucracy, Payment, and Small Business Set-asides. The following selected quotes provide the reader with a sense of the feelings the Government's business partners have about their relationship as sellers. Additionally, the researcher explores the relationship between the negative statements and whether a company lost business with the Government in the last five years.

Feedback

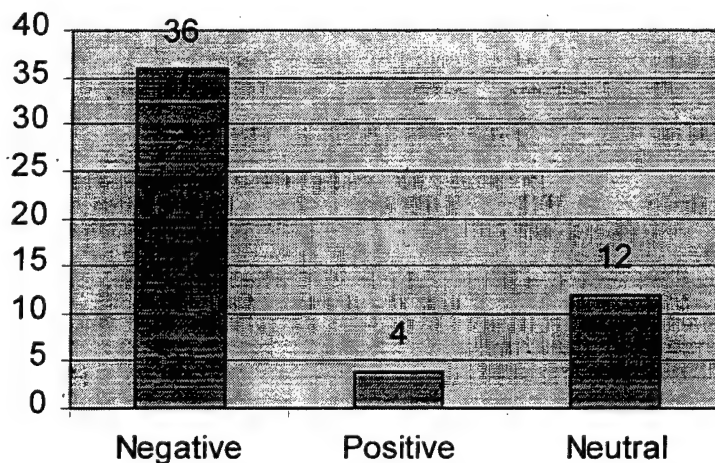


Figure 4.12 **Source: Developed by Researcher**

a. Bureaucracy.

The impression that the researcher received from the feedback was that the vendors are frustrated because it is harder to work with the Government compared to another vendor. In particular, there is too much paperwork and too many people to deal with in the Government. Examples of the feedback are: "Too many people to deal with on any given contract." "Too many overlapping initiatives...to avoid excess charges of current bureaucracies." "From my personal dealings with the Government these past 25 years I can honestly say they still don't have it right." "DCAA personnel and policies are antiquated and irrelevant." "I would not like even to do business with the Gov't, just too much Bull*&%#." "...Too much paperwork." "You should try to eliminate paperwork." "Our business with the Government is low relative to our overall sales because of the extensive bureaucracy and administration associated with doing business with the Government. Our Government related business represents <2% of our total business, yet it consumes approx. 25% of the administrative maintenance we do."

The researcher hopes that the businesses who commented in this section take the time to review the

efforts of the Government in the last several years to correct these situation. The "single face to industry" concept will help ease the feeling of working with a Government with too many personnel to deal with and the relaxation of certain regulations will remove layers of paperwork previously required.

b. Payment.

Few things can upset a business relationship as much as money. So it is no surprise that the second most frequent complaint was payment. Some examples of the comments are: "DFAS has a terrible track record for administration & payment." "Also, when it comes to the payment offices, centralization is needed. Why does there have to be so many ways of doing things?" "The payment record of the Government is atrocious. DFAS and DCMC do not communicate. Invoices sometimes take six months to be paid. Even though FAR regulation stipulates that the Government owes interest, it is rarely paid. The problem is a combination of red tape and untrained personnel (mostly at DFAS). This is a real disincentive to do business with the Government." "Trying to get payment on

many Government contracts is worse than pulling teeth. The effort is incredible, results are negligible."

Electronic commerce is the Government's best ally in reducing pay errors. Additionally, the use of Government Purchase cards will speed payment and reduce the administrative burden for DFAS. If these measures do not help, then perhaps it is time for DCMCs to explore becoming involved in payment. They could offer decentralized attention, which may satisfy the vendors who do not like dealing with an organization that is hundreds of miles from their location.

c. *Small Business.*

The researcher has the impression that several of the vendors in this region feel threatened by the preferential treatment that small disadvantaged businesses receive. There is a sense of resentment, perhaps heightened by the pressure of immense competition in this region. This would be especially true for a large business that is denied the opportunity to compete because the Government has decided only small businesses may bid for certain goods. If these are not just jealous statements, then DCMC Springfield should investigate whether these

vendors are aware of fraudulent use of 8a classification by other vendors.

Examples of the comments are: "We feel that procurement officials are not abiding by small purchase procedures including women-owned firms." "We take exception to SDB clauses in major contracts. We are seeking an end to SDB preferences." "8A for many firms is a hoax." "SDB preferences based on race are wrong." "Small business set-asides add too much cost."

It is doubtful that there is wrong-doing on behalf of the small businesses. The researcher believes that these vendors may be aware of a family owned business where the wife's name was registered as the owner for purposes of being "woman-owned." Some vendors resent this because they perceive this action as a method of playing the system to ones advantage. It may appear as though one is taking advantage of a loophole in the procurement system, but what those companies are doing is not illegal.

d. Assorted Comments

Although those three categories made up the majority of returns, several interesting comments were made that had only one or two mentions, but are noteworthy:

"Giving work to Prisoners takes business away from private companies." "Commercial Off The Shelf (COTS) should mean COTS, the Government tinkers with COTS to the point it loses its meaning." "The Government is not commercial enough." "There is a lack of Quality Assurance Representatives available when we finish our production and that delays goods being signed as accepted." And "The Government has a lot of bad MIL-SPECS floating around and they are not being fixed."

The feedback provided by the contractors could be used by DCMC to develop new metrics to track progress in reducing the number of such complaints. If DCMC finds that they are succeeding in some areas such as contract closeout or terminations, they could reallocate the personnel that were in those areas and have them concentrate on fixing these areas.

e. Lost Business and Negative Feedback

The researcher wanted to know if a company that has lost DOD business in the last five years is more likely to provide negative feedback. The 36 companies that provided negative feedback were analyzed to determine if they were the ones that lost business.

Twice as many of the negative comments were provided by companies that saw a decrease in the amount of business with the Government compared to companies that declared their business increased (Figure 4.13). However, it cannot be said that decreased business alone is responsible for the negative feedback. Nearly twice as many companies in the population taking the survey noted (Figure 4.11) that they had less business with the Government compared to five years ago.

It appears negative feedback is proportional to the response concerning business with the Government over the last five years. So, change in percentage of work with the Government is not the factor responsible for negative comments. Increasing and decreasing business companies as a percentage of the survey population are equally likely to provide negative feedback. The researcher considers this important to the validity of these results. If it appeared that only disgruntled business partners were providing comments, the feedback would appear biased. Even companies who have increased their Government business took the time to provide feedback. However, the equal participation in this section does indicate that the average vendor is upset with the Government.

Negative Feedback and Change in Government Business in Last 5 Years

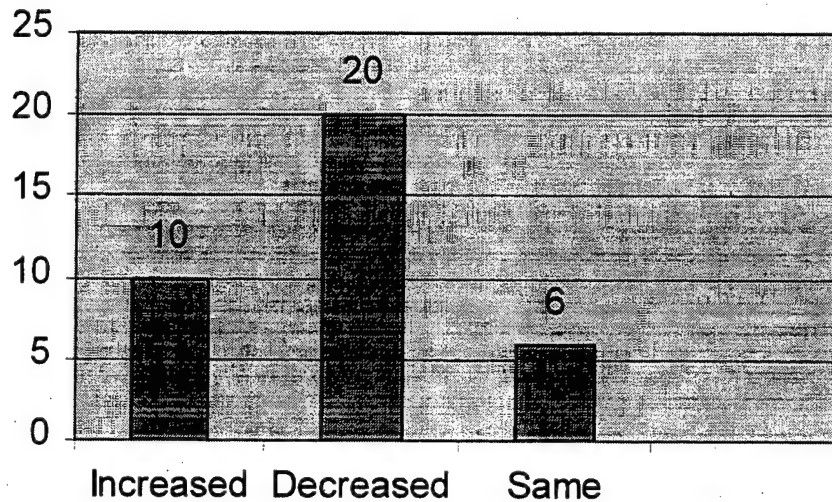


Figure 4.13 Source: Developed by Researcher

8. Identification

The researcher anticipated difficulty in retrieving personal information from the participants, however this was not the case. Due to the sensitive nature of questions about "number of employees" and annual revenue coupled with the potential embarrassment from questions concerning delinquency and negative feedback, the researcher expected

a low percentage of companies willing to identify themselves.

The vast majority, 83% of all respondents, surrendered their anonymity and provided the researcher with the information to contact them (Figure 4.14). This is interpreted as a good sign that the responses provided in the survey are solid replies considering that the majority of companies stood behind their replies and would be willing to be contacted to back up these responses.

Another way to view these results is, any company that would take the time to participate in the study would have nothing to hide. Companies who worried about exposure probably were among the 75% of companies that did not reply.

C. REJECTED MAIL

As much as the researcher was pleased with the amount of completed surveys, the researcher was confounded by the amount of surveys rejected by the United States Postal Service. One hundred and twelve of the envelopes were returned to the Naval Postgraduate School. Nearly all of

the rejected envelopes were marked as "undeliverable" with notations of "moved" or "no such name at this address."

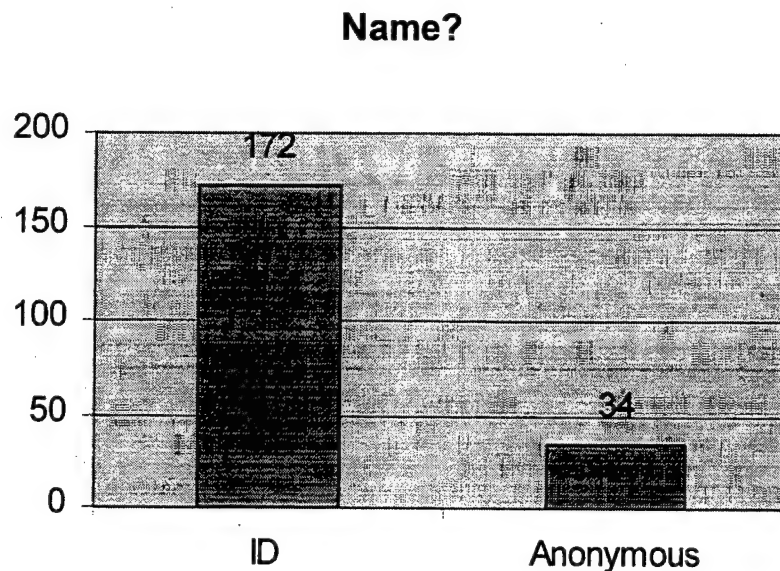


Figure 4.14 **Source: Developed by Researcher**

The Defense Logistics Agency's web site has a page that allows one to input a CAGE code and retrieve the most current address for a contractor that DLA has on file. This proved to be helpful since DCMC Springfield provided a CAGE code listing of all their contractors. Using this, the researcher was able to find correct addresses for 43 of the companies. Using the updated information, a second round of mailings was conducted for these 43 to have a

second chance to take the survey. Even more frustrating was the fact that six of these "DLA assisted" addressed surveys came back rejected a second time!

Of the remaining 69 CAGE codes that could not be re-addressed, ten were not re-mailed because the DLA site showed the company's new address as out of state. Since these contractors were out of the geographic boundaries of the study: Pennsylvania (3), New York (3), California (2), Texas (1), and Illinois (1), they were no longer valid.

Eliminating the ten confirmed moves from the rejections still left 59 to be dealt with. Unfortunately, 18 CAGE codes did not register with the DLA query. Between the U.S. mail rejection and DLA's lack of recognition, one might assume these companies no longer exist. The other 41 CAGE codes tested on the DLA query site revealed the same address, as far as DLA was concerned, as the address provided to the researcher by DCMC Springfield. These mystery companies may no longer exist or may have moved but did not take the time to alert DCMC Springfield or DLA.

The question remained, "How can so many addresses be wrong?" After all, these addresses were supposedly the best known addresses for the companies at the time of the request for assistance. In order to get an understanding

of how 12.6% of the addresses could be wrong, DCMC Springfield was contacted.

The researcher sent an e-mail to the six Administrative Contracting Officers (ACO) at DCMC Springfield. Three ACOs replied. Two explanations were offered as to why the database had so many miscues.

First, the list of contractors is very dynamic. A database of over a thousand contractors can have one or two legitimate changes per day. This can account for a large percentage of the wrong addresses. More than 45 days passed from the time the database was transmitted to the researcher, the survey was formed, the database was turned into mailing labels, and mailed to the addresses.

In addition to the aging of the data caused by the researcher setting up the survey process, personnel at DCMC Springfield may have added to the aging of the database. The researcher was given the impression that it can take a few months in some cases for the information to be manually entered when the person responsible is backlogged or simply has not deemed it a high priority to update the list.

The second most likely reason was human error. Addresses may have been entered incorrectly by DCMC personnel or the contractor provided an illegible address.

Human error is not limited to the Government. Personnel at the contractor's office may have forgotten or are slow to inform the Government of their change of address.

From the interviews with the ACOs, this last possibility should only account for a small number of the rejections because the contractor is financially motivated to let the Government know of any moves. Failure to alert the Government could result in not getting paid or at least a delay.

Failure of a contractor to alert the Government of a change of address makes life difficult for the Quality Assurance Representative (QAR). At completion of the contract or at First Article Testing, the QAR needs an accurate address to reach the company. If a contractor has not informed the Government of the move or someone at DCMC is aware but has not passed this information onto the QAR, the Government will experience difficulties in acceptance. This in turn can look bad on the contractor's performance if it makes them late for delivery. Again, this will have a financial repercussion.

The least likely, although possible explanation, is that a contractor went out of business and did not want to tell the Government. For the few companies that fall into

this category, they would not like to be found because they are not likely to ever deliver their goods or may owe the Government money stemming from an overpayment in Progress Payments and do not have the ability to pay the Government back.

D. SUMMARY

This chapter presented and analyzed the data obtained from the questionnaire conducted by the researcher. The data were presented as they were found in the second part of the survey. As each question was discussed, results and background were provided for each of the topics of concern for DCMC Springfield's contractor base.

In addition to presenting the data, this chapter discussed the frustrations associated with conducting a survey using less than accurate address lists and offered explanations of why the researcher received so many rejected pieces of mail.

Chapter V looks at the effect of business size on the results of Chapter III and IV. Six topics are presented where small and large businesses noticeably differed in the way they responded to the survey questions. Four topics

are presented where the researcher assumed small and large businesses would differ but, in fact, did not.

V. LARGE AND SMALL BUSINESS COMPARISONS

A. INTRODUCTION

Due to the many ways that small and large businesses are different, it would not be completely accurate to look at the results of Chapters III and IV and speak absolutely about the vendor population in this region. To look at the results for one trait and to say that was representative of all DCMC vendors may be correct for some areas, but in other traits large businesses may have a completely different outlook than their small business counterparts. This chapter identifies and evaluates those differences.

Section B of this chapter examines six survey questions, previously explored in Chapters III and IV, to evaluate the difference in the magnitude in which small and large businesses responded. Section C of this chapter presents the data for which it appears business size had no effect on the way a company replied to the survey yet the researcher believed there should have been a difference in the responses from small and large businesses.

B. CIRCUMSTANCES WHERE BUSINESS SIZE MATTERED

Small and large businesses differed in the way they responded to several questions on the survey. The differences examined in this section include those related to (1) ISO9000; (2) DOD business trends; (3) PROCAS, FPRAs, and CAS; (4) age of the company; (5) goods vs. services; (6) Government vs. non-Government business; and (7) subcontracting.

1. ISO9000 Certification

This topic demonstrates how significant an impact business size has on a company's response to a question. Participation for large companies heavily weighted the response as first displayed in Chapter IV. Fifty-eight percent of large businesses (Figure 5.1) said "yes" to ISO9000 certification compared to nine percent of small businesses (Figure 5.2).

If one adds "working towards" to both large and small businesses' "yes" results, large businesses have exactly twice the likelihood of embracing certification, 86% versus 43%. The most popular response for small businesses was

"no" at 57%, which matches the "yes" replies for large businesses.

Large Business & ISO9000

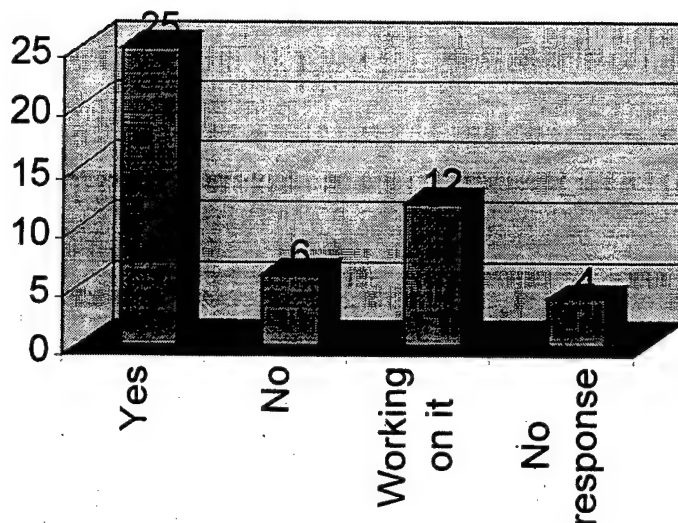


Figure 5.1 Source: Developed by Researcher

The most likely reason the disparity exists is economics. It can be an expensive process to become ISO9000 certified. The price tag may be too much for some small businesses to be willing to attempt it. Large businesses may not like the cost associated with certification but they may have no choice. For them it may

be a matter of certify or get left behind in the competitive market.

Small Business & ISO9000

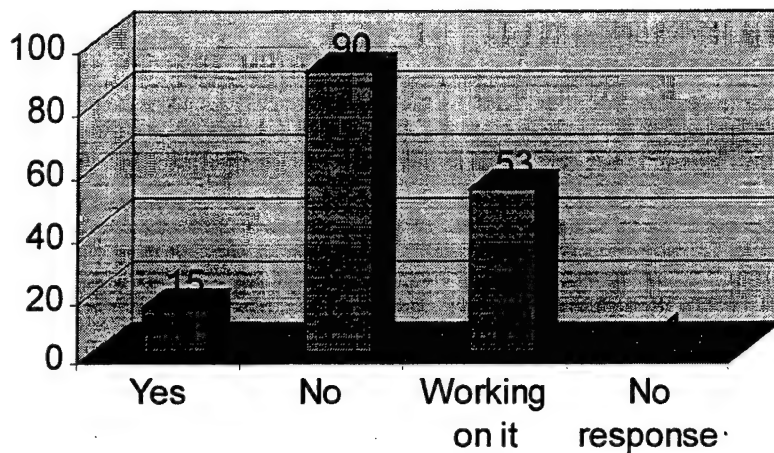


Figure 5.2 **Source: Developed by Researcher**

For many of the smaller companies, higher level qualifications like ISO9000 may not matter. They are a small cog in the business world and do not make enough waves to try to capture business where ISO9000 certification may matter. Some small businesses may not have even heard about ISO9000.

Small business should be concerned, based on these results. The small percentage of qualified companies suggests that these companies do not take ISO9000 seriously. This will hurt these companies as industry shifts to a total quality environment and DOD expects self-certification. The large businesses in this study have been gaining business with DOD over the last five years. The researcher believes that large businesses' acceptance of ISO9000 will cause the large businesses to continue to gain at the expense of the small businesses.

The small businesses in this study have been losing business with DOD over the last five years. Without ISO9000, this will only get worse. If these companies turn to the international market to replace the business they lost with DOD, they will find yet another door closed to them. More so than the United States, the international market will require an international standard of quality such as ISO9000. The large companies appear to understand the importance of ISO9000 in the international market place. Thirty-two percent of large businesses with significant foreign sales are ISO9000 certified. This is nearly double the result for small businesses (18%).

2. Government Business Now Versus Five Years Ago

The last five years have not been as kind to small businesses as they have been to large businesses in this territory. By comparing Figures 5.3 and 5.4 one can see that the most frequent response for small business is "decreased." In contrast, the most frequent response for large businesses is "increased."

If one considers "stayed the same" (21%) as a positive thing and adds those numbers to the "increased" (25%) it is still not enough (46%) to overcome the overwhelming negative climate for small businesses (54%). Given the same application to the large businesses (39% for "increased" + 27% for "stayed the same" = 66%) business stability is far greater.

One would expect a "decreased" response for all involved with Defense Acquisition. The analysis of the different direction taken by small and large businesses over the last five years indicates that large businesses have managed to weather the change in the DOD business climate. A possible explanation is that large businesses had the resources to continue to attract what money was available of the decreasing Defense budgets over the last

five years. It appears that small businesses lost DOD business on the same downward trend as DOD spending. .

Large Business and Amount of DOD Contracts Now Compared to 5 Years Ago

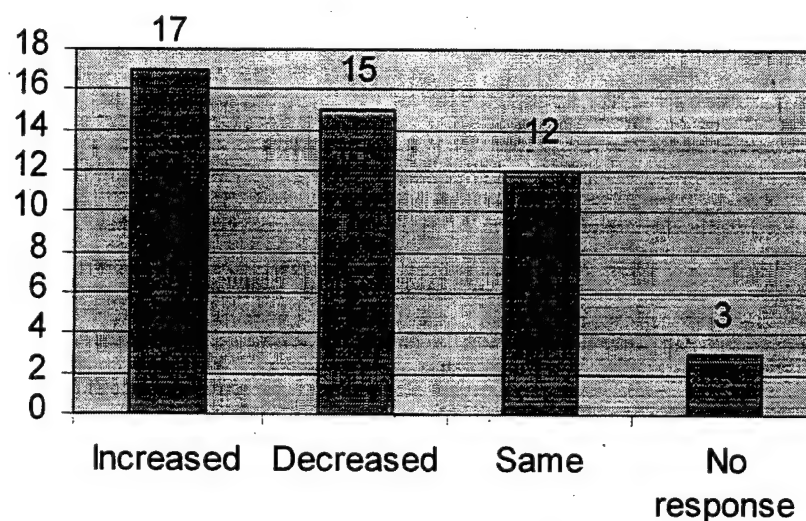


Figure 5.3 Source: Developed by Researcher

The researcher believes that large businesses will continue to maintain or increase the amount of business they do with the Government. Small businesses will continue to lose business. Two forces will help large businesses to receive more of DOD's business. First, small businesses will hurt themselves by not participating in the areas where large businesses have taken a lead such as

ISO9000 and PROCAS. Small business participation was so low in many of the topics of Survey Part II that the researcher believes small businesses will not have the competitive skills and knowledge to attract DOD business.

Small Business and Amount of DOD Contracts Now Compared to 5 Years Ago

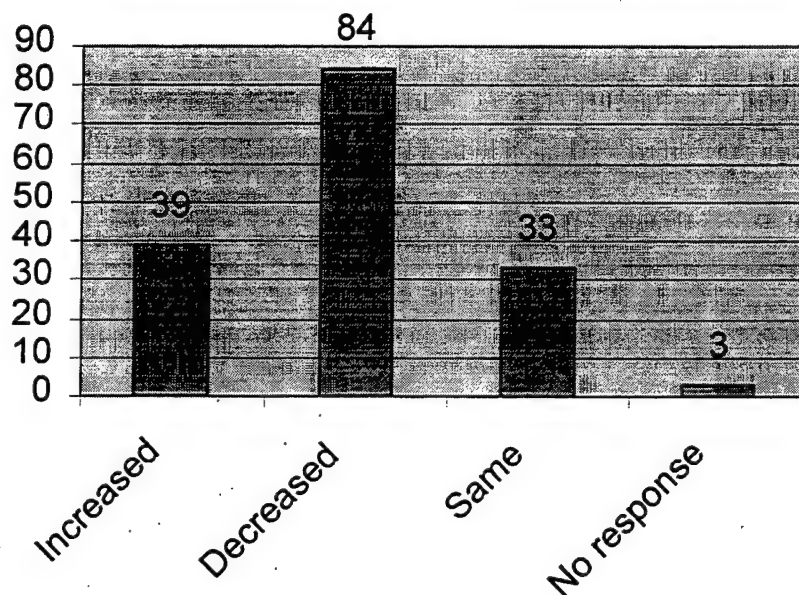


Figure 5.4 **Source: Developed by Researcher**

Second, large businesses will grow and absorb some of the small businesses as a result of mergers. This will make the large businesses even more resourceful and will

allow them to attract more DOD business. If the large businesses conduct several mergers in the DCMC Springfield territory, they will be able to retain more business "in house" and reduce the amount of subcontracts they let to small businesses. This will further reduce the participation of small businesses with DOD and make subcontracting goals difficult to obtain.

The researcher predicts that as large businesses continue to fare better than the small businesses, the ratio of small businesses to large businesses (currently three to one) will decrease. It is possible that a similar study of this region in five years will reveal a balanced proportion of large and small businesses.

3. Selected Contract Arrangements

Survey Part II, question 2, asked the respondents about four terms to ascertain the involvement of DCMC Springfield's contractors in a few non-routine contracting procedures. Of those four terms, three of them are more familiar to the larger businesses; Process Oriented Contract Administration Services (PROCAS), Forward Pricing Rate Agreements (FPRA), and Progress Payments.

Process Oriented Contract Administration Services had the widest margin of participation between large and small businesses. Thirteen percent of large businesses replied they participated in PROCAS (Figure 5.5). Less than one percent of small businesses participated (one company).

The difference can be attributed to the fact that PROCAS is aimed at assisting the success of large contracts. Many of the early players in PROCAS were businesses large enough to justify their own in-plant DCMC office [Ref. 12]. PROCAS requires significant effort considering all the Government offices and contractor personnel that become involved. This level of involvement may be too much for a small business to handle. Considering the nature of the contracts awarded to small businesses it may not be worth the heavy upfront involvement by the Government.

Although PROCAS is not something that small businesses would be expected to participate in, that does not mean small businesses should be content to accept this. First, small businesses need to understand the definition of PROCAS and be aware of what PROCAS has to offer. Pro-active involvement by small businesses would be an asset.

Small versus Large in PROCAS Participation

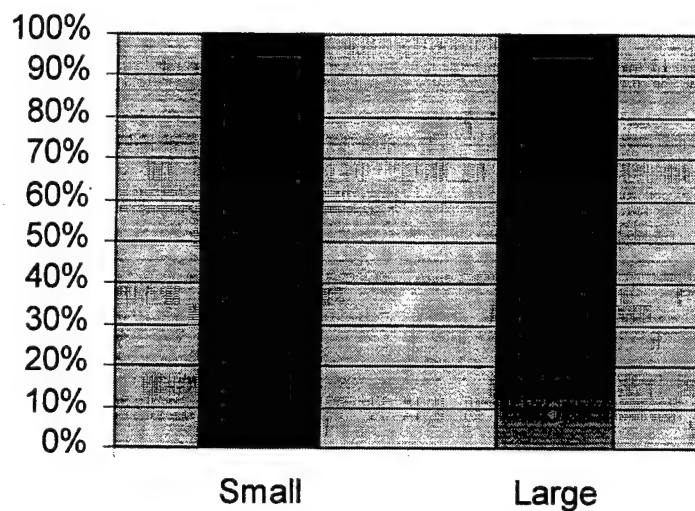


Figure 5.5 **Source: Developed by Researcher**

Large businesses may be the ones most likely to use PROCAS, but it is the small business that could benefit the most. Our smallest businesses, the ones with very few employees, face the most hardships in completing DOD contracts. If they had early involvement with DCMC, they could increase the likelihood that they will deliver on time. In turn, this would decrease the need for Small and Disadvantaged Business Units to provide Certificates of

Competency, because small businesses would develop strong past performance records on their own.

The results for FPRAs are similar to the lop-sided results of PROCAS (Figure 5.6). Once again, large businesses at 15%, have an edge over small businesses at 4%. Reasons similar to PROCAS can be used to explain why large businesses and small businesses differed in the results for FPRAs. The FPRA is another example where overall use by small businesses is low because of the effort required to establish the arrangement. A contract must be large enough to justify Government and Contractor time spent on negotiating rates to apply to cost categories.

One would expect to see FPRAs used only for large businesses where the Government anticipates significant effort in determining what rates to use and the contractor and Government have agreed that an FPRA will save expense and time compared to using actuals that may be a year or more from being established. It would be great if small businesses had more participation in FPRAs, but the researcher does not consider it realistic to spend a lot of effort on increasing small business participation in FPRAs.

Small versus Large Companies that have Forward Pricing Rate Agreements

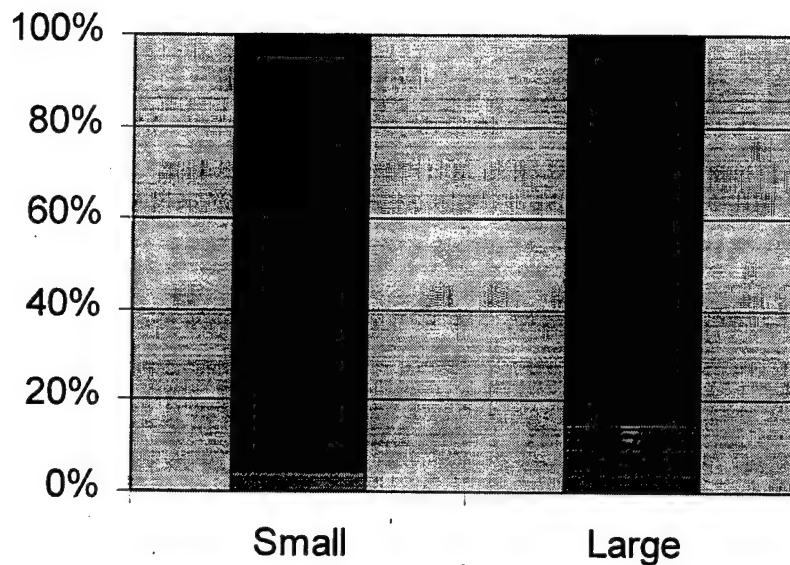


Figure 5.6 **Source: Developed by Researcher**

The majority of small businesses have Fixed-Price type contracts with the Government. The Government does not generally use FPRAs for Fixed-Price type contracts. If the researcher could establish that the few small businesses that have negotiated contracts are experiencing difficulties in contract closeout related to rate determination, then the researcher would be more concerned about small business and FPRAs.

The researcher does not believe that large businesses are fully utilizing FPRAs. At 15%, there are a lot of companies that could benefit from coordinating with DCMC. The time spent on establishing the rates will decrease the time it takes to closeout the contract. DCMC Springfield does well in contract closeout, however the researcher believes that the majority of problem closeouts (greater than ten with one company) could be reduced with more use of FPRAs. Quick resolution of contract closeout will provide quicker final payments. The Government will reduce its administrative burden and the contractors will be paid sooner rather than later.

Cost Accounting Standards, like both topics proceeding, are used primarily on DOD's larger contracts. The difference in CAS use for large businesses over small businesses is a 2:1 advantage in percentage points (Figure 5.7). Once again, this implies that large businesses are more likely than small businesses to participate in Government programs or to have contracts large enough in dollar value to require more oversight or regulation.

Small versus Large Companies Subject to Cost Accounting Standards

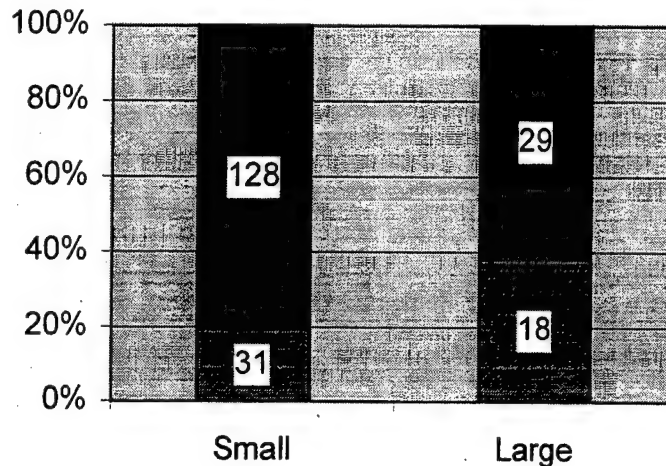


Figure 5.7 **Source: Developed by Researcher**

Nearly half of all large businesses have contracts for which CAS applies. The researcher believes that if the respondents were asked if they would want CAS applied to their contracts, the answer would most often be "no." As discussed in Chapter IV, contractors do not like CAS. It is in the area of topics like CAS that the Government needs to address large businesses' concerns if we are to continue having productive relationships.

The researcher believes that DCMC's vendors will have a much smaller percentage of CAS applicable contracts in the future. The push to be more business-like will cause DOD to stay out of contractor's books. The Government spends a considerable amount of time and money to review contractor accounting records. Less CAS contracts would bring cost savings. If the Government truly acted like a business it would not have an opportunity to look into its trading partner's records because that concept is unheard of in the commercial market.

As the Government continually pushes to raise the dollar threshold for the contract value before it has the right to inspect accounting records, the percentage of contracts subject to CAS will decrease. Many contract currently subjected to CAS will not be in the future due to relaxation of laws. This will occur not only by raising the dollar value, but also by increasing the number of exemptions for requiring cost information. This will particularly affect small businesses because they hold many of the smaller dollar contracts. Small businesses will experience a great reduction in the percentage of contracts to which CAS will apply.

4. Age

The average time a respondent has been in existence is 40.7 years. This figure represented the whole population. Small businesses, however, had an average age of 36.7 years. This is much lower than large businesses which have been around for 54.9 years, on the average.

The researcher attributes the difference to the higher probability of survival for large businesses. Large businesses have more resources to draw upon during slow periods. Some of the large businesses are former small businesses that were successful enough that they outgrew their previous classification. Small businesses have lifespans of 18 years less than large businesses because many small businesses fail and new, small businesses enter the market to fill that niche. This keeps the small business average age lower.

If the DCMC Springfield region's small businesses merge with each other or are absorbed by large businesses as the researcher predicts, one can expect the average age of small businesses to remain less than the average age for large businesses. The large businesses will continue to age. The small businesses will remain level or decrease.

C. CIRCUMSTANCES WHERE BUSINESS SIZE DID NOT MATTER

In Section B, several factors were discussed which clearly distinguished large businesses from small businesses. In this section, the researcher presents the results of the survey where he anticipated differences between small and large businesses caused by business size, but the analysis revealed no difference.

1. Progress Payments

The researcher presumed that small businesses would need extra assistance in the form of progress payments from the Government, more so than large businesses. The graph in Figure 5.8 shows an even response for progress payments. Twenty percent of small and large companies indicated they receive progress payments. This indicates small businesses are not more dependent on receiving progress payments than large businesses.

The results can be attributed to the fact that all businesses, large or small, desire progress payments. For small businesses, solvency may be a matter of survival, and

large companies can be in situations where financing is important to them.

Small versus Large Companies Receiving Progress Payments

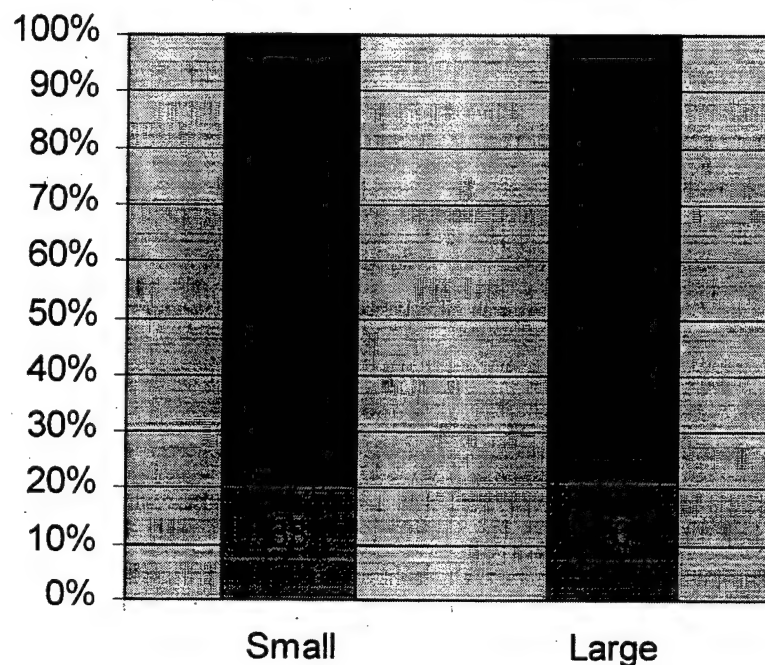


Figure 5:8 **Source: Developed by Researcher**

The large sums of money involved in a large contract can hurt a large business without a positive cash flow. A large business is more likely to be publicly held. Stockholders watch financial indicators very carefully. A large business does not want to appear "strapped" for cash

during the time it devotes to fulfill a contract. With a steady cash flow, the large business can maintain positive financial indicators and satisfy shareholders.

The fact that small businesses are not receiving more progress payments compared to their large counterparts may be a sign that small businesses in this region are either solvent enough not to need financing, or they are receiving awards for small dollar value contracts where progress payments are not required. The researcher hopes that the numerous wrong addresses, explained in Chapter IV, are not the result of small businesses going bankrupt because they could not pay their obligations while waiting for Government final payment.

2. Service Sector

Another presumption by the researcher was that the small businesses would dominate the services sector. The researcher had the opinion that small businesses were more likely to provide services compared to large businesses. Figure 5.9 shows nearly the same percentage of small and large contractors provide a service vice goods. Eleven

percent of small companies have a service contract and 13% of large businesses have a service contract.

Small vs. Large Business Participation in the Services Sector

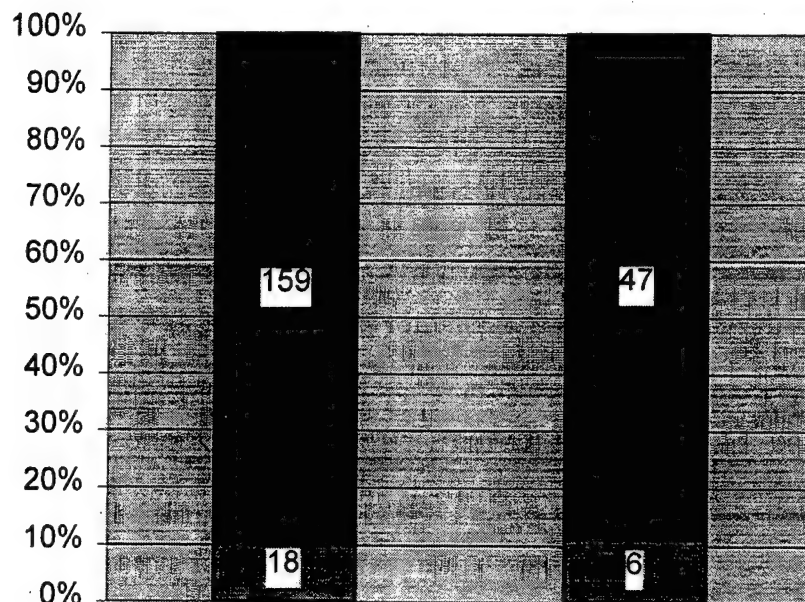


Figure 5.9 Source: Developed by Researcher

The nearly equal participation for both business sizes tells us that small businesses do not have a greater tendency to be service providers. It appears large businesses seek business opportunities in the service sector as much as their small business counterparts. In a

related topic, DCMC Springfield's small and large businesses were equally represented amongst all vendors in the production of goods. Eighty-eight percent of small and large businesses indicated they had a contract to manufacture or distribute goods.

There is no doubt that Northern New Jersey is industrial and brimming with manufacturers. However, the researcher finds it hard to believe there are so few service contracts in this region. The researcher believes that for one reason or another service providers did not return as many completed surveys as they could have. If more service providers responded, the researcher believes the small businesses could be distinguished from the large businesses in this area.

Conspicuously absent from the respondents are those companies located near Fort Monmouth, McGuire Air Force Base, Earle Weapons Station, and Picatinny Arsenal that provide dry cleaning, food service, etc. The researcher believes these contractors would be small businesses and would demonstrate a small business dominance in the service sector.

3. Dependence on Government

This classification resulted in yet another inaccurate assumption by the researcher about how the business sizes would respond. The assumption was that small businesses would have a higher percent figure in the category of "greater than 50%" of a vendor's business from the Government, than a large business. Also, the researcher believed small and 8a firms were more vulnerable to dependence. Figure 5.10 reveals that Small, 8a and Large Businesses are equally likely to receive greater than half of their business from DOD.

Small businesses and 8a firms would be more effected by events occurring in the free market than events effecting the Government. If the economy is strong, the small businesses are likely to be successful. This is a positive trait for this region considering how Defense acquisition spending is down. Although small businesses are worse off over the last five years with DOD, the researcher believes that if the question were asked about overall business and not just Government business, these small businesses would indicate they have prospered over

the last five years just like the general business environment has.

**Contractor's with Greater than 50% of
their Business with the Government**

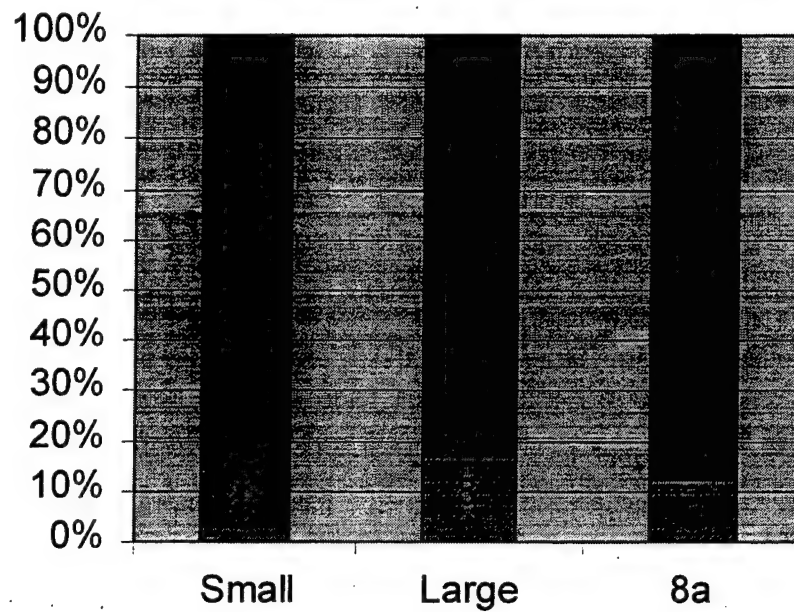


Figure 5.10 **Source: Developed by Researcher**

The percentage for large businesses (17%) is slightly higher than the other two columns. This could be caused by the presence of a few, large DOD contractors located in the

DCMC territory. Companies such as ITT and GEC perform a substantial portion of their work for the Government. As discussed earlier, 8a firms are not dependent on the Government. This would explain why 8a's percentage was the smallest (12%).

4. Subcontracting

In the researcher's mind, it is the small business that gets the subcontracting work. The Government requires many of the large contractors to provide Small Business Subcontracting Plans, because the Government promotes socio-economic goals to ensure that some of the acquisition budget flows down to small businesses. As Figure 5.11 indicates, small and large businesses equally participate in providing sub-contracted goods for larger Government contracts.

The results indicate that despite the Government's promotion of small business participation in DOD contracts via subcontracting, large businesses are receiving just as much of the available DOD subcontracts. This may not be a problem if DCMC Springfield routinely meets its subcontracting goals or if the subcontracts with the large

businesses are for products that small businesses do not make and therefore large businesses are not impeding small businesses receiving subcontracts.

**Small versus Large Companies
Who Have Subcontracts with
Other DOD Contractors**

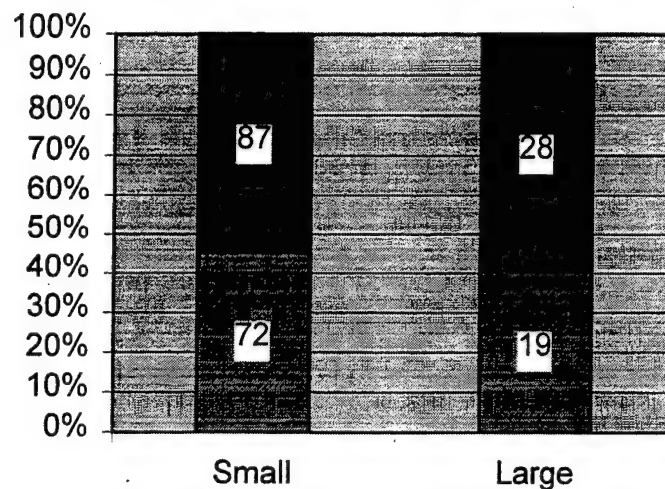


Figure 5.11 Source: Developed by Researcher

The researcher commented previously that small business domination would decline as large businesses absorb small businesses. If this occurs, the researcher expects small businesses with subcontracts to decrease because large businesses will hold back subcontract work. If they can make the good in-house, they do not need to

seek small businesses to manufacture for them. Large businesses' percent will increase because they will be receiving some of the work that would have previously gone to the small businesses that they absorbed.

This should concern the buying commands because it will be more difficult to reach socio-economic goals if this occurs. Goals may require adjustment if current goals are not realistic in a large business dominated environment. If the goals are enforced despite a changing business market, the remaining small businesses could be better for it. Fewer small businesses sharing a static amount of business will make the remaining small businesses prosperous.

D. SUMMARY

This chapter covered the circumstances when the size of a business had an affect on the survey results and presented circumstances when business size had no affect on the results despite a hypothesis by the researcher that it would.

At the start of data organization, the researcher hypothesized about the effects that business size had on

the survey results. In four circumstances the researcher was inaccurate. Those four sections were discussed in this chapter.

Chapter VI will draw conclusions about DCMC Springfield's contractors, offer recommendations for improvements to the Government-industry relationship, answer the research questions, and make suggestions for further research.

VI. CONCLUSION AND RECOMMENDATIONS

A. INTRODUCTION

The purpose of this study was to determine who are the contractors that interact with the U.S. Government for which Defense Contract Management Command Springfield, New Jersey is the cognizant contract administration organization. The principal conclusions were derived from data accumulated and analyzed from a survey that was distributed to all contractors in Northern New Jersey who had an active contract with the Department of Defense. The researcher was able to derive several significant findings and subsequent conclusions from the survey data and make recommendations based on these conclusions.

B. CONCLUSIONS

1. Small businesses dominate DCMC Springfield's territory. The statistics in this research showed that 77% of the respondents identified themselves as small businesses. The researcher believed this figure might be an underestimate based on the results from the question

that asked how many employees at a business. If having less than 500 employees was the only criteria to determine business size, the percentage of small businesses out of the total population could be 90% for this region.

Small businesses dominated particular fields in this region. The researcher divided the primary product or service replies into 28 categories for analysis. Six of those categories were 100% small business; Spare Parts, Communication, Computers, Fabrics, Tools, and Cable. Small businesses heavily dominated two of the three largest categories (by number of firms), Electronics (90%) and "Nuts, Bolts, Gaskets, Washers" (88%). There were no categories where large businesses clearly dominated.

2. DCMC Springfield's vendors manufacture goods.

Eighty-eight percent of the respondents indicated that they have a contract with DOD to manufacture a good versus having a contract to provide a service. The service sector has low representation in DCMC Springfield's district (12%).

The researcher believes that the true percentage of small businesses for this region might be higher than 88%. When one looks at the responses to the question that asked

what is the primary Standard Industrial Classification Code for the services they provided, it appears that less than 12% provide services. Only eight SICs were in the "Services" range of numbers (Division I, 7000-7999).

3. Northern New Jersey is industrial, competitive, and heavily concentrated. New Jersey is the densest state in the union for population per square mile. New Jersey's businesses follow that pattern. In a relatively small area, several thousand companies exist and most of them are known as smokestack industries. The researcher found 545 companies in a 30-mile radius, (half-circle) west of the Hudson River. It takes the third largest employee pool in the DCMC Eastern District to manage these businesses. Compared to other areas of our country, the number of employees at DCMC Springfield (greater than three hundred) would be responsible for a several state territory.

This dense region is highly competitive. Odds are that the product a firm makes is also made by a rival across town. Greater than 86% of all contractors indicated they compete in a free market. The researcher found very little evidence of oligopolies or monopolies.

4. DCMC Springfield Vendors are not cutting edge companies. The types of goods provided by DCMC Springfield vendors are established technologies. Not many of the responses appear to be cutting edge products. This is supported by the average age of the companies in this region, 40 years old. Most companies in Northern New Jersey have been making basically the same goods for decades. One associates new technologies with start-up companies. Companies with single digit ages made up the smallest group of vendors in this population.

Based on the age of the businesses and the nature of the goods produced, the researcher believes the small businesses are manufacturing their goods from fairly defined specifications. It is likely that the majority of goods are made from aged, military specifications. This can make the transition to commercial specifications difficult, as the commercial specifications in this territory are really military specifications.

5. DCMC Springfield vendors are not dependent on DOD business for survival. The largest response to the question that asked what percentage of all your business is with the Government was "less than 5%." "Less than 5%" and

the next possible response, "5 - 25%," accounted for 71% of all respondents. Only 7% of the respondents were in the portion, "all or nearly all my business is with the Government."

Another indicator of independence from the Government is how well this region survived the drastic downturn in the DOD acquisition budget. The majority, 51%, of the businesses did not lose business with the Government compared to five years ago. If this region were heavily dependent on DOD for its business that figure would have been greater.

6. Companies that use PROCAS, ISO9000, and FPRAs are primarily large businesses. These three areas were noted for the large difference between the way large and small businesses employed them. These three topics are linked to large businesses because of their nature. PROCAS and FPRAs are primarily for large dollar value contracts. Because most of the items manufactured by DCMC Springfield's small businesses are mature items, it is likely that the majority of contracts are awarded through the Invitation For Bids (IFB) process. PROCAS and FPRAs are not used on contracts resulting from the Sealed Bid method. Large businesses

will likely have more negotiated awards, where PROCAS or FPRAs could be used. ISO9000 is expensive to achieve and most small businesses cannot afford the cost or do not need ISO9000 certification in the field they represent.

7. Large Businesses are systems integrators and small businesses are Original Equipment Manufacturers.

Small businesses appear to manufacture the piece parts that make up larger items. There was no indication in the answers to the question about primary goods that any small business made large end items, like tanks, airplanes or ships. The small businesses are concentrated in areas such as "Nuts, Bolts, Gaskets, Washers." It is likely the large businesses take the piece parts from the small businesses and integrate them into larger goods.

The small business manufacturers are using well-defined specifications to make these piece parts. Mature goods are purchased primarily through IFBs. If the Contract Administrator was aware of this trend, DCMC Springfield could plan more effectively for dealing with these businesses. It takes a different set of personnel skills to deal with mature industries compared to cutting edge industry. This information can be used to determine

what training is needed for Quality Assurance Representatives and Technical Specialists.

8. Contract Closeout is not a problem for DCMC Springfield. Contract closeout is often mentioned as a frustrating burden for the Government. Horror stories of hundreds of contracts in backlog and contracts several years old are topics of frequent discussion. The results of this survey indicate DCMC Springfield has done an aggressive job in making contract backlog a manageable workload.

Fifty-two percent of the respondents stated they had zero contracts awaiting closeout. Only 13% have a large backlog (greater than 10 awaiting closeout). These are very good figures. The researcher backs up these numbers with the fact that no respondent provided feedback about contract closeout. Considering how many negative things were said about payment and paperwork, the absence of a negative comment about closeout, from any of the respondents, is a positive sign that contract closeout is not a problem for DCMC Springfield.

9. Large businesses are gaining business with the Government and small businesses are losing business.

Chapter IV presented the results on the question of whether a company gained business with the Government, lost business, or stayed the same during the last five years. Large businesses clearly fared better during the defense cutbacks. The number one response for large businesses was "increased." Compare this to the number one response of small businesses, "decreased." This is important to know because things could become more difficult for the small businesses.

If Defense dollars get even tighter, large businesses may withhold some of the work previously provided to small businesses. If a large business keeps this work in-house, the small businesses will experience further reductions in the amount of business they perform for the Government. Another danger for small businesses has to do with electronic commerce. If large businesses have the resources to keep up with technology, they will prosper. On the other hand, if small businesses are not prepared to match the Government's drive toward a paperless environment, the small businesses could find themselves

losing the competitive race for diminished defense acquisition funds.

C. RECOMMENDATIONS

1. Develop a code to readily identify small businesses in the vendor database. Small Businesses are so important to this territory that a notation should be placed next to a vendor's name so that someone reviewing a record will know immediately that the contractor is a small business.

Small businesses have concerns that may not apply to large businesses. Easy recognition of the small businesses can assist the administrator in how to orient the interaction with the small business. Strategies and methods for handling small business affairs can be chosen in early planning when one knows whom one is dealing with.

2. Maintain the small business office. During DOD's drawdown, the Government has reduced infrastructure. Each DCMC must look at their organization to find opportunities for force reduction. The researcher recommends that the

office responsible for small business liaison not be reduced.

Small businesses are so critical to the makeup of this DCMC territory that it is imperative that the link between them and the Government does not suffer during this era of cutbacks. Not only is there a clear requirement to maintain an open atmosphere for small business contact, but also the small business office's role could be expanded.

As the researcher discovered, many small businesses are not aware of some important Government programs. Small businesses frequently placed question marks on the survey when they did not understand the terms. One of the major complaints listed by the respondents was how difficult it was to reach someone at the DCMC. If the small business office cuts back personnel, it will be even more frustrating for small businesses.

3. Educate. As mentioned in the previous recommendation, many businesses in DCMC Springfield's region are not aware of many of the current Government initiatives. The researcher suspects many of our business partners are not aware of the changes taking place in the Government's push to re-engineer its business practices.

Some positive public relations via an outreach program could help win back some of the vendors who do not want to deal with the Government because of the bureaucratic reputation of DOD.

A vigorous training program should be conducted on acquisition reform to connect the small businesses to the direction of the future of acquisition. The focus should be on the features of the Government's reform initiatives and how small businesses can take advantage of these and participate.

In the conclusion section, the researcher stated that this region was not high-tech and was an aging environment. The office responsible to assist small businesses can help to make them aware of the current trends in production in the United States. The small businesses can be alerted to trade fairs and contracting conferences.

4. Take advantage of electronic means of contracting. The researcher discovered that it is difficult to reach the businesses electronically. When the researcher was preparing the survey, he found he could not send the survey by e-mail because DCMC Springfield did not have an e-mail listing for all its vendors. The Government

needs to take advantage of all the electronic methods of commerce that it can in order to move toward a paperless environment.

One of the major complaints the respondents had was payment. By shifting to electronic transfer of funds (EFT), DCMC can reduce the number of pay problems it experiences. Also, EFT can help the smaller workforce to do more with fewer personnel.

The contractor address list was not current. Using electronic communication could remove the human error element and provide instant update compared to a clerk that may be a month behind in entering paperwork.

5. Use a periodic survey to find pulse points. By reaching out to the vendors in a DCMC region, the Government can show it has concern. In turn, the Government can use this information to find out its weaknesses and commit effort to fixing problems. If DCMC Springfield sent a survey similar to this one, it would discover, for instance, the need to investigate the contractors who have greater than ten contracts awaiting closeout. It could also direct DCMC Springfield to take a

hard look at pay problems and reducing unnecessary paperwork.

One of the most important things that could be discovered by surveying this population is the capacity of DCMC Springfield's vendors to achieve a paperless environment. The Government is pushing its offices to use electronic commerce wherever practicable and to achieve a paperless office in the very near future. That sounds great, but if the small businesses in this region are not capable of handling electronic commerce, DCMC Springfield will be stifled in its attempts to achieve a paperless environment.

D. ANSWERS TO THE RESEARCH QUESTIONS

The following are the researcher's answers to his primary and subsidiary research questions that were derived from his findings and conclusions. The subsidiary questions will be answered first, followed by the primary research question.

Subsidiary Question 1: Who are the vendors in DCMC Springfield's vendor base and how might the vendor base be

classified for demographic analysis? The researcher wanted to form the image of the average company in Northern New Jersey that does business with DOD. The typical vendor under DCMC Springfield's cognizance:

- is a small business
- provides a good, likely in the electronics field
- been around for 40 years
- has less than 50 employees
- has sales over \$1 million
- does less than 25% of its business with DOD
- operates in a fully competitive environment
- has a subcontract for a DOD prime contract
- does not have substantial foreign sales

These statistics are based on the results of survey Part I questions that asked the companies questions about their demographics.

Subsidiary Question 2: What patterns and trends in DCMC Springfield's vendor's contractual relationships can be discovered through subsequent analysis of the DCMC

Springfield vendor base? Several trends were noted in the analysis of DCMC Springfield vendor base. Participation in Process Oriented Contracting Administration Services (3%), Prime Vendor (3%), and Forward Pricing Rate Agreements (7%) was low. Participation in ISO9000 (20%), Progress Payments (21%), and Cost Accounting Standards (24%) was moderate.

Several positive circumstances were noted. Contract closeout does not appear to be a problem for DCMC Springfield contractors. Very few contractors are protesting or are being terminated. More than half of all of DOD's business partners in this region are no worse off than they were five years ago in regard to the amount of business they perform for DOD. The vendors in this study were very cooperative and exceeded the researcher's expectations in percentage of total surveys returned (25%) and percentage of businesses that were willing to identify themselves (83%).

The discouraging news was 25% of the respondents indicated they were late on a delivery in the last three years. Twenty-five percent of the respondents chose to provide feedback to the researcher about the Government-Private Industry relationship. Ninety percent of the critiques were negative. The researcher believes the

biggest obstructions in the Government-Private Industry relationship are Government bureaucracy and payment problems.

Subsidiary Question 3: What effect does business size (small versus large) have on vendor participation in various Government programs?

Business size can have a dramatic effect on vendor participation in Government programs. Nearly all questions had response differences of a few percentage points between small and large business participation. In several topics the difference was vast.

Large businesses were responsible for the results of PROCAS, FPRA, CAS, and ISO9000. In each of these circumstances the large business response was several times greater than the small business response. Large and small businesses differed by ten percentage points or more in their responses to contract closeout, terminations, and protests, but not as dramatically as the previously mentioned topics.

Large businesses had a markedly better experience regarding the amount of business they do with the Government now compared to five years ago. Large businesses increased or maintained the amount of business

they had. On the other hand, the majority of small businesses lost business with the Government over the last five years.

Subsidiary Question 4: What information about DCMC Springfield's vendors, discovered during research and currently not known to DCMC Springfield, could be provided to benefit DCMC Springfield's contract administration personnel? The researcher can pass on a few pieces of information that he discovered during his research.

The vendor address listing is not as accurate as it should be. The researcher estimates that 12% or more of the addresses maintained at DCMC Springfield for its contractors are wrong. This can make it very frustrating when trying to contact a vendor. It can also make deliveries late if the Quality Assurance Representative goes to the wrong address for inspection.

It is important to have an e-mail listing for every company that has an e-mail account. The researcher understands that 100% of the vendors will not be on-line, but every month that passes brings us closer to full e-mail capability. DLA is in the process of developing an e-mail listing for every contractor that has a CAGE Code and an e-

mail account. The researcher recommends that the automation staff at DCMC Springfield tap into this resource and get the word out to all contract administrators that this listing is available.

Give small businesses the attention they deserve. It is easy to get wrapped around the large businesses because they receive all the focus and have large staffs to ensure they get noticed. After spending the last few months getting to know this region, the researcher has come to appreciate just how important small businesses are to DOD. Because they are so many and most do not have a voice in industry, the small businesses tend to get little nurturing. Combined as a force, it is clear that small businesses are the true backbone of the acquisition market.

Overall results appear good for DCMC Springfield, but some attention should be given to the outliers in the survey. In particular, pay attention to the companies with greater than ten contracts waiting closeout; the companies that did nearly all their business with the Government and had subcontracts for other DOD prime contracts; and companies that did not understand some of the terms in the survey such as PROCAS, FPRAs, CAS, 8a, and Prime Vendor.

Primary Research Question: What will a comprehensive analysis of Defense Contract Management Command Springfield's supplier base suggest about how the Department of Defense could improve the administration of Government Contracts?

The analysis of DCMC Springfield's supplier base suggests that the Government needs to conduct its acquisition offices in the professional manner commensurate with the business world. The Government needs to appear business-like, act as a mentor to small businesses, improve payment performance, and take advantage of electronic commerce.

The Department of Defense can improve the administration of contracts by using the best allocation of personnel available. Using the results of this survey, this would indicate that small business experts are important, technical specialists do not need cutting edge training at this point in time, and the promotion of self-certification programs, such as ISO9000, can allow the Government to ease the inspection requirements and the costs associated with oversight.

E. RECOMMENDATIONS FOR FUTURE RESEARCH

The researcher has three recommendations for future research.

1. Conduct the same research on the same command five years later. This would provide a good opportunity to further analyze this DCMC office and also determine how the area adapts to the ever-changing DOD acquisition environment. Some of the interesting things to look for will be changes in participation for ISO9000, foreign sales, and Prime Vendor; and how the region fares in regards to increasing or decreasing its business with DOD.

2. Conduct the same research on a different DCMC office now. It would be interesting to see the differences one would encounter by analyzing a DCMC office in a different state. If this survey was provided to a DCMC's vendor base in the Southwest, the results could be drastically different. Some examples of the manner in which the two offices could be very different are: the mix of goods versus services, the average age of the companies,

ISO9000 certification, and density (or lack) of the businesses in the territory.

3. Explore a few different avenues if conducting this same research. If the researcher was doing this survey all over again, a few questions would be added. Topics that the researcher would like to know about: What characteristics allowed a company to be deemed 8a? Who are the "cutting edge" companies? Has foreign sales increased or decreased over the last five years? The total number of active contracts held by the companies responding to the survey (would have come in handy for analysis of closeout, terminations, and protests)? Are the Government's business partners aware of the FAR Part 15 rewrite or other initiatives to streamline Government acquisition? When was the last time your company attended a business fair? How many pay problems have you experienced in the last year? How often do configuration changes occur? Who are the major buyers? How many pre-award surveys were conducted in the last five years? How many of those pre-award surveys resulted in a negative recommendation? How many negative recommendations resulted in a Small Business Administration (SBA) Certificate of Competency (COC)?

APPENDIX A. SURVEY QUESTIONNAIRE AND COVER LETTER

10 SEP 98
LCDR Ron Kocher
Naval Postgraduate School
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(408) 333-0316
e-mail: rjkocher@nps.navy.mil

Dear Sir or Madam:

This cover letter is an introduction and a request for assistance in a Thesis research project on the Department of Defense's industrial base for northern New Jersey. This letter is intended for the person at your activity responsible for Government contracts. This person may be yourself, or a person in sales, contracting, acquisition, purchasing or in the case of small businesses, the president. If you are not sure who should be answering this survey, please do not hesitate to reach me at the e-mail address listed above for assistance.

My name is Lieutenant Commander Ronald J. Kocher. I am an active duty Naval Officer working on a Master's of Science in Management with an emphasis on Contract Management at the Naval Postgraduate School in Monterey, CA. Upon graduation I will report for duty to the Defense Contract Management Command (DCMC) at Picatinny Arsenal, New Jersey. I am looking forward to working with you for the next several years.

The focus of my research is exploring the demographics of the vendors in northern New Jersey that have active contracts with the Department of Defense (DOD) for which DCMC Springfield, New Jersey performs contract administration. My goal is to determine if an understanding of whom the Government contracts with will help DOD to foster a better working relationship with its partners.

You have been selected because you have a contractual relationship with the Department of Defense. The responses you provide to this questionnaire may help both you and the Government on future acquisitions. For this reason I ask that you take a few moments to accurately answer the questions on the following page. I know your time is valuable so I have limited the amount of questions and attempted to write them in styles that reduce the amount of time required to respond. Please return the completed survey in the self-addressed, stamped envelope. If you prefer, a copy of the survey is available on my website, <http://www.sm.nps.navy.mil/ppages/kochersurvey>.

Your response is anonymous. Thank you in advance for your assistance.

R. J. KOCHER
LCDR, SC, USN

Note: The 1st page of the survey is on the reverse of this double-sided document.

PART I DEMOGRAPHICS

1. a. What is the primary product or service of your company? _____
b. Is your Government contract for a good _____ or a service _____ ? (check one)
c. What is your primary Standard Industrial Classification (SIC) Code? _____
2. How many years has your company been in existence? _____
3. Please indicate the number of employees at your organization: (check one)
a. 0-19 _____ d. 100-249 _____ g. 1000-4999 _____
b. 20-49 _____ e. 250-499 _____ h. 5000-9999 _____
c. 50-99 _____ f. 500-999 _____ i. 10,000 or greater _____
4. What is the approximate current annual sales volume of your company? (check one)
a. Under \$100,000 _____ d. \$1,000,000 - \$4,999,999 _____ g. \$50,000,000 - \$100,000,000 _____
b. \$100,000 - \$499,999 _____ e. \$5,000,000 - \$9,999,999 _____ h. Greater than \$100,000,000 _____
c. \$500,000 - \$999,999 _____ f. \$10,000,000 - \$49,999,999 _____
5. What is the approximate total value of all active contracts you have with DOD? (check one)
a. Under \$500 _____ d. \$10,000 - \$25,000 _____ g. \$500,000 - \$999,999 _____
b. \$500 - \$2,500 _____ e. \$25,001 - \$99,999 _____ h. \$1,000,000 - \$4,999,999 _____
c. \$2,501 - \$9,999 _____ f. \$100,000 - \$499,000 _____ i. Greater than \$5,000,000 _____
6. What percentage of your business is with the U.S. Government? (check one)
a. less than 5% _____ d. 51 - 75% _____
b. 5 - 25% _____ e. Our company does nearly all or all its business with the Government. _____
c. 26 - 50% _____
7. Would you classify your company's industry position as: (check one)
a. a monopoly _____ (you are the only regional or national source for your product or service)
b. an oligopoly _____ (there are only one or two other manufacturers in your industry)
c. full competition _____ (there are many companies that produce your product or service)

8. a. Does the U.S. Government recognize your company as a small business? Yes _____ or No _____
b. If yes, does the U.S. Government recognize your company as an 8A firm? Yes _____ or No _____
9. In addition to the contractual work you have with DOD, do you perform a substantial amount of work as a subcontractor for another company performing on a Government contract? Yes _____ or No _____
10. Is foreign sales a significant portion of your sales volume (> 25%)? Yes _____ or No _____

PART II ACQUISITION QUESTIONS

1. Is your company ISO9000 certified? Yes _____ or No _____ No, but working towards _____
2. Do you have contracts with the Government for which any of the following apply:
- a. PROCAS? Yes _____ or No _____
 - b. Forward Pricing Rate Agreements? Yes _____ or No _____
 - c. Government Cost Accounting Standards? Yes _____ or No _____
 - d. Progress Payments? Yes _____ or No _____
3. Do you have a contract with the Government that supports a Prime Vendor program?
- a. Medical _____
 - b. Subsistence _____
 - c. Other _____
 - d. Do not participate _____
4. How many contracts do you have that are completed/delivered, but not closed out?
- a. None _____
 - b. One _____
 - c. 2 - 5 _____
 - d. 6 - 10 _____
 - e. Greater than ten _____
5. In the past 3 years, have you:
- a. Been notified by the Government that you were delinquent in delivery?
Yes _____ or No _____
 - b. Been terminated:
for Default? _____ for Convenience? _____ No terminations _____
 - c. Protested:
to the PCO? _____ to GAO? _____ to ASBCA? _____

6. Compared to five years ago, has the volume of business you do with the Government:

Increased? _____ Decreased? _____ Stayed the same? _____

This completes the questionnaire. I would like to leave a few lines (optional) for you to use if you would like to bring any matter to my attention concerning the relationship between your company and the United States Government. Of particular interest would be recommendations for future studies that would improve the business relationships between the Government and Private Enterprise.

Note: All data obtained from this questionnaire are confidential. It will not be used by any party other than the Thesis author. You have the option to remain anonymous, however if you have no objections, please provide the following in case I would need clarification regarding any of your answers:

CAGE Code _____

Company name _____

Address _____

Your name (p.o.c.) _____

e-mail address _____ *

Phone number _____

Fax Number _____

* if you are not aware, the Defense Logistics Agency is trying to collect the e-mail addresses of all companies that have CAGE Codes to improve future communication. If you have not responded, please visit http://131.87.1.54/cage/cage_search.htm Thank you.

APPENDIX B. MAP OF DCMC SPRINGFIELD TERRITORY



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